PARTICIPATORY LAND USE PLANNING PERFORMANCE EVALUATION DESIGN REPORT

MCA INDONESIA – GREEN PROSPERITY PROJECT

Submitted to the
Millennium Challenge Corporation
By
Social Impact, Inc.
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TABLE OF CONTENTS

TABLES

FIGURES

ACRONYMS

Name	Definition
AMAN	Alliance of Indigenous Peoples of the Archipelago (*Aliansi Masyarakat Adat Nusantara*)
APL	Other Land Uses (*Areal Penggunaan Lain)*
ATR/BPN	Ministry of Agrarian Affairs and Spatial Planning
BAL	Basic Agrarian Law
BAPPEDA	Regional Planning and Development Agency (*Badan Perencanaan Pembangunan Daerah)*
BAPPENAS	National Planning and Development Agency (*Badan Perencanaan Pembangunan Nasional*)
BIG	Geospatial Information Agency (*Badan Informasi Geospasial*, formerly BAKOSURTANAL)
BKPM	National Investment Board
BKPMD/A	Indonesian Investment and Coordinating Board *(Badan Kordinasi Penanaman Modal Daerah/Asing)* for domestic and foreign investment
BKPRD	Regional Spatial Planning and Coordinating Board (*Badan Koordinasi Penataan Ruang Daerah*)
BL	Baseline
BPN	National Land Agency (*Badan Pertanahan Nasional*)
BPPT	"One-stop" Licensing Office (*Badan Pelayanan Perijinan Terpadu*)
BPS	Statistical Bureau
BRG	Peatlands Restoration Agency
CBA	Cost Benefit Analysis
CBO	Community-Based Organizations
CIFOR	Center for International Forestry Research
CLCS	Community Liaison and Coordination Specialist
CMEA	Coordinating Ministry for Economic Affairs
D.C.	District of Columbia
DS	Dataset
EDR	Evaluation Design Report
EQ	Evaluation Questions
EQUI	Evaluation Quality, Use and Impact
ERR	Economic Rate of Return
ET	Evaluation Team
FGD	Focus Group Discussion
GHG	Greenhouse Gas
GIS	Geographic Information System
GOI	Government of Indonesia
GP	Green Prosperity
HCV	High Conservation Value
IMS	Information Management System
IRB	Institutional Review Board
JKPP	The Participatory Mapping Network (*Jaringan Kerja Pemetaan Partisipatif*)
KADIN	Chamber of Commerce and Industry
KII	Key Informant Interview
KKI	Indonesia Conservation Community (*Komunitas Konservasi Indonesia*)
KUGI	Indonesian Catalogue of Geographical Elements (*Katalog Unsur Geografis Indonesia*)
LAPAN	Center of Remote Sensing Utilization
LUCF	Land Use Change and Forestry
MCA-I	Millennium Challenge Account – Indonesia

MCC	Millennium Challenge Corporation
MOU	Memorandum of Understanding
MOEF	Ministry of Environment and Forestry
MOHA	Ministry of Home Affairs
MtCO2e	Million Metric Tons of Carbon Dioxide Equivalent
MW	Megawatts
NGO	Non-Governmental Organization
NRM	Natural Resource Management
NTB	West Nusa Tenggara province
ODIM	Office of Data and Information Management
OSS	One-Stop Shop
PE	Performance Evaluation
PKK	Empowerment Family Welfare (*Pemberdayaan Kesejahteraan Keluarga*)
PLUP	Participatory Land Use Planning
PMAP	Participatory Mapping and Planning
PPIG	Center for Geospatial Data Outreach
PPIT	Center for Thematic Integration Mapping
PPWB	Center for Village Boundary Administration Mapping
PTSP	Pelayanan Terpadu Satu Pintu (PTSP) (see OSS)
REDD	Reducing Emissions from Deforestation and Degradation
RM	Resource Management
RTRW	Rencana Tata Ruang Wilayah /Regional Spatial Plans
SCF	Social and Communication Facilitators
SI	Social Impact
SOP	Standard Operating Procedures
SOW	Scope of Work
TBD	To Be Determined
TOC	Theory of Change
TPPBD	Village Boundary Delineation and Demarcation Committees (*Tim Penetapan dan Penegasan Batas Desa*)
UN	United Nations
UNEP	United Nations Environment Programme
U.S.	United States
VBS	Village Boundary Setting
VPT	Village Participatory Team
WALHI	Friends of the Earth, Indonesia (*Wahana Lingkunan Hidup Indonesia*)

EXECUTIVE SUMMARY[1]

The Millennium Challenge Corporation (MCC) aims to overcome poverty and increase economic growth in Indonesia. Such efforts are indelibly linked to key land and development reforms taking place in Indonesia, which hold global importance in terms of environment and climate change. Much of Indonesia's economic development challenges stem from land issues, namely based on a natural resource economy and a large rural population dependent on the agricultural — particularly land use — sector.

The Indonesian government has prioritized key reforms in natural resource conservation and economic development. The MCC Green Prosperity (GP) Project which ran from 2013-2018 was strategically placed to provide the foundational elements to support a reorientation of investments towards more sustainable land uses that also increase economic growth. The Participatory Land Use Planning (PLUP) activity, as the lead initiative of MCC GP, supported a process whereby communities, private sector, and government at multiple levels could engage on key accountability mechanisms setting the stage for wider GP implementation. These included issues that ranged from village boundary setting and resource management (VBS/RM), hardware and software interventions to support improved spatial planning with key institutions, engagement on licensing and permitting systems, and working with a broad set of stakeholders to engage in participatory development planning that supported economic growth and emissions reductions.

PLUP was a $42 million activity which was divided by geography and implemented by multiple contractors.[2] The first PLUP contract was awarded in 2015 and included implementation of Tasks 1-4 in the four starter (or pilot) districts in two provinces. This was referred to as Participatory Mapping and Planning (PMAP) 1. PMAPs 2-4 and 6-8[3] were implemented between January 2016 and March 2018 in 36 additional (or expansion) districts, in nine additional provinces. Expansion districts included some, though not all, of the Tasks. In total, PLUP was implemented in 40 districts, 11 provinces, across Indonesia. PMAP contracts were implemented by multiple contractors.

The four core tasks to achieve PLUP objectives, can be summarized as follows:

- Task 1, the only task of the four that is implemented at the sub-district and village level, covered participatory determination, geo-location, and physical demarcation of village boundaries, the mapping of natural and cultural resource areas within the villages, and the creation of geospatial databases of the information collected – VBS/RM;
- Task 2 sought to develop a geospatial database in each district and coordinate such efforts with policy developments taking place nationally;
- Task 3 included two steps, engaging on legal analysis of regulatory systems of land and natural resources and district level license/permit systems;

[1] For ease of reference, the Executive Summary has been amended directly to reflect all the adjustments made to this Evaluation Design Report (EDR) for Expansion Districts and Pilot Districts (Stage 2) in 2019. Throughout the body of the report (Sections 2 - 4), text remains from the Stage 1 EDR (2016) to preserve the original evaluation design, with highlighted text signaling an update to the Stage 1 design made for Stage 2. Full details of all changes made to this Stage 2 report for each applicable section in the main body of the report are included in Annex 1: Evaluation Design Changes (Updated November 2019).

[2] Contract no. 95332418C0273 between the Millennium Challenge Corporation and Social Impact Inc. dated September 24, 2018.

[3] PMAP 5 was cancelled.

- Task 4 explored the opportunity to institute an Information Management Systems (IMS) in addition to utilizing and integrating the results of Tasks 1-3.

MCC is conducting a pre-post qualitative performance evaluation (PE) of PLUP. To do this, PMAP 1 locations (called pilot sites) were planned for study in an early results evaluation (Stage 1) and interim (Stage 2).[4] PMAP 1 was selected for the evaluation because a) it was the only contract that included Tasks 1 - 4; and b) it was the only contract that was implemented in locations selected independently of Green Prosperity (GP) grant selection. Additionally, in Stage 2, a set of expansion districts (covering other PMAP contracts) will be studied and available geospatial and administrative data will be considered in the measurement of key PLUP outcomes at the medium- and long-term. Each Stage is led by Social Impact, Inc.

The PE's primary purpose is to identify the project results (outputs and outcomes) and assess program implementation. This will enable MCC and Millennium Challenge Account (MCA-I) to capture lessons learned and inform current and future Compact initiatives in land resource management and jurisdictional boundaries.

As noted, the evaluation design includes two Stages of data collection: Stage 1 identified immediate realized PLUP outputs and outcomes, and identified lessons learned during PMAP 1 implementation;[5] Stage 2, planned for 2020 will capture changes in PLUP outcomes over an extended period of time in PMAP 1 sites, accounting for longer-term effects not readily materialized by the time project activities concluded. Stage 2 will also include an additional set of expansion sites and secondary data not available (or in existence) in Stage 1. The evaluation in expansion sites and will be focused on district-level and higher-level outcomes. Stage 1 of data collection took place shortly after the scheduled completion of PMAP 1 implementation in the four starter districts, in August - September 2016 (and was informed by a scoping trip in January 2015). Stage 2 data collection is informed by the results from Stage 1 data collection and a scoping trip conducted in July 2019.

The evaluation will use a mixed-method approach, with primary qualitative data collection and available quantitative secondary data. Qualitative data collection will include a thorough review of selected PMAP monitoring narrative reports, as well as a series of Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) with project stakeholders across multiple levels of selected PMAPs. Primary qualitative data findings will be triangulated against secondary quantitative data and spatial data made available through MCC and government stakeholders, or through readily accessible public data.

Five evaluation questions (EQs) were developed to guide this PE, the first of which seeks to identify progress (in Stage 1) and achievement (in Stage 2) of short-term and medium-term outcomes of PLUP. The outcomes and associated sub-questions were developed in 2016. The linking of the EQs with the short-term and long-term outcomes and the proposed indicators for

[4] Note that MCC may opt at a later date to launch a separate contract to do longer-term tracking of PLUP results (Phase 3) based on the design proposed and realization of interim results, particularly as it relates to adoption and adherence to district level land use plans, coordination with One Map, and sustainability and utilization of licensing and permits databases and related IMS.

[5] The Stage 1 evaluation report can be found in the MCC Evaluation Catalogue: https://data.mcc.gov/evaluations/index.php/catalog/180

tracking progress of these outcomes is outlined in this report and elaborated in Annex 3. Additional updates to the EQs, sub-EQs, and outcomes were made in 2019 (see Annex 1 section 3).

Stage 1 evaluation data collection included KIIs, FGDs, and Participant Observations (POs). The evaluation sample included 232 respondents (66 KIIs, 22 FGDs, and nine POs). All data collection was conducted according to pre-developed and tested interview protocols. The Stage 2 evaluation data collection will include KIIs, FGDs, and POs in addition to collection and analysis of geospatial and administrative data in both pilot and expansion sites. The evaluation sample for expansions sites added in Stage 2 is proposed in Annex 1 and includes a target of three provinces, six districts, and four villages. Stage 2 in pilot sites maintains the same sampling approach as detailed in the body of this report.

The evaluation of the pilot sites is designed to be gender-responsive and will evaluate the potential differential impacts of PLUP implementation on males and females (and other identified minority or vulnerable groups). The gender-responsive design includes the sampling and interviewing of both men and women (interviewed in separate groups, when possible). The evaluation of expansion sites does not address the household or community level; however, gender balance will still be a factor in sampling wherever possible. Evaluation team (ET) members are comprised of three Indonesian-based specialist and one international specialist. ET members have Indonesian expertise in program evaluation, capacity strengthening and land use planning, and all are culturally and linguistically fluent in Bahasa Indonesia, enabling them capture nuances during interviews/discussions conducted in the national language.

This evaluation design report (EDR) outlines the implementation of the PLUP evaluation. The main body of this report was finalized during Stage 1, in 2016, and pertains to PLUP pilot sites" evaluation under PMAP 1 implementation at Stage 1 and 2. Annex 1 updates the report with the inclusion of PLUP expansion sites and evaluation activities under Stage 2 with some additional detail specific to Pilot sites included in Annex 2.

1. INTRODUCTION AND BACKGROUND

1. Country Context

Indonesia has the third largest area of tropical rainforest in the world, and with 68 percent of its landmass covered by forests, is also the sixth largest greenhouse gas emitter.[6] Recent increased economic development has been linked to the accelerated use of fossil fuels; yet an estimated 85 percent of Indonesia's greenhouse gas (GHG) emissions stem from land use activities, with 37 percent due to deforestation and 27 percent due to peat fires.[7] Illegal logging continues to be a major cause of deforestation, with the United Nations Environment Programme (UNEP) estimating that it costs the country approximately USD $3 million a year in lost revenues.[8]

The majority of Indonesia's poor live in rural areas that are rich in natural resources, but over-extraction and inadequate management of these resources threaten Indonesia's ability to sustain high rates of economic growth and reduce poverty. One in seven villages in Indonesia does not have access to reliable and affordable electricity, and many more rely on expensive and dirty diesel generation. Unsustainable land use practices, such as illegal logging, conversion of marginal land for agriculture, and water pollution, continue to adversely affect the Indonesian landscape and the resources on which individuals rely for economic activities[9].

2. Objectives of this Report

This report outlines the PLUP evaluation design and implementation to be undertaken in Indonesia. The following sections include an overview of the Compact and the interventions to be evaluated, the evaluation design, and the administrative management for the undertaking. Sections 2 - 4 relate to the PLUP design as envisioned at the baseline. Updates to the design, including updates to the PLUP theory of change, methods, evaluation timeline, and administrative items can be found in Annex 1 and 2.

[6] Ministry of Forestry. 2012. Statistik: Bidang Planologi Kehutanan Tahun 2011.
[7] National Council on Climate Change. 2010. Setting a course for Indonesia's green growth.
[8] UN-REDD. 2011c. UN-REDD Programme in Indonesia Semi-Annual Report.
[9] Kusters, K., Sirait, M., et al. 2013. Formalising participatory land-use planning – Experiences from Sanggau District, West Kalimantan, Indonesia. Both ENDS, Amsterdam. [online]

2. OVERVIEW OF THE COMPACT AND THE INTERVENTIONS EVALUATED

A. Overview of Project and Implementation

i. Project Description

To combat environmental degradation and alleviate rural poverty, The Millennium Challenge Corporation (MCC) entered into a five-year, USD $600 million Compact with the Government of Indonesia (GOI) in April 2013, establishing the Millennium Challenge Account – Indonesia (MCA-I), which aims to reduce poverty through economic growth. The Green Prosperity (GP) Project, the flagship project of the Indonesia MCC Compact with a budget of USD $332 million, is designed to support the GOI's commitment to a more sustainable, less carbon-intensive future by promoting environmentally sustainable, low carbon economic growth. The main objective of the project is to work with local communities to create economic opportunities that alleviate poverty and improve management of Indonesia's natural capital. The project will provide a combination of technical assistance and grants to help communities improve land management practices and design and implement economic activities that enhance livelihoods and protect critical ecosystem services that people rely on for income and wellbeing. It is anticipated that activities under the GP project will complement the GOI's efforts to reduce emissions from deforestation and environmental degradation. More broadly, the project is also expected to help foster greater, greener, and smarter outside investment in Indonesia by improving the basis by which land use decisions are made and by creating incentives for increased deployment of cleaner technologies.

The Green Prosperity project as a whole is comprised of four discrete activities, detailed below:

1. The **Participatory Land Use Planning (PLUP)** activity is meant 1) to ensure that projects funded by the GP Finance Facility are designed on the basis of accurate and appropriate spatial and land use data, and adhere to and reinforce existing national laws, regulations and plans; and 2) to strengthen the capacity of local communities and district-level institutions to manage their own land and resources. This is accomplished through participatory village boundary setting (VBS), updating and integrating land and other natural resource use plans, and enhancing district and provincial spatial plans. The first PLUP contract, called PMAP 1, was awarded to Abt Associates to implement PLUP Tasks 1 through 4 in the four starter districts. PMAP 2 through 8 are planned to be contracted to multiple implementers in 2016 and will differ in the PMAP 1 Tasks they include.[10] Overall, PMAP contracts will include implementation in a total of 45 districts throughout Indonesia.
2. The **GP Facility** provides grant financing to mobilize greater private sector investment and community participation in renewable energy and sustainable land use practices. The GP Facility investments are intended to enhance sustainable economic growth and social conditions while also reducing Indonesia's carbon footprint. The GP Facility targets investments in commercial and community-based renewable energy projects less than ten

[10] PMAP 2 -4 will include Tasks 2 – 4 only. The other PMAP contracts are not yet procured (as of August 2013). Task 1 was not included in contracts for PMAP 2 – 4 due to budget and also due to the fact that PMAP 1 will result in the completion of a VBS/RM Operation Manual that is hoped to guide and influence future Task 1 implementation.

megawatts (MW) in size, sustainable natural resource management, and community-based projects to promote improved forest and land use practices. These investments will support a number of objectives that promote productive use of energy and protect renewable resources from which energy can be derived. Grants will be funded through three schemes, or "windows": Partnership Grants, Community-based Natural Resource Management Grants, and Renewable Energy Grants.

3. The **Technical Assistance and Oversight** activity is designed to provide assistance and oversight for eligible districts, project sponsors and community groups to identify and develop potential investments in sustainable low-carbon economic growth. This activity will also institute a comprehensive set of procedures to track and evaluate the progress of the projects it funds, and the effectiveness of the GP Project activities implemented to facilitate the success of those projects. Technical Assistance will include performing or reviewing detailed feasibility studies, engineering designs, as well as safeguard and requirements on environmental, social and economic benefit, monitoring and evaluation to meet GOI permitting and international performance standards.
4. The **Green Knowledge** activity supports and enhances the results of GP projects by facilitating the collection, application and dissemination of knowledge relevant to low carbon development within and beyond GP districts. The activity will provide capacity building for local and provincial stakeholders, develop and improve centers of excellence in science and technology related to low carbon, and broad networks for information exchange, knowledge generation, and sharing.

The evaluation design presented here is specific to PLUP, a $43 million activity which is divided by geography and implemented by multiple contractors. The first PLUP contract was awarded to Abt Associates to implement PLUP Tasks 1 - 4 in the four starter districts. This is referred to as "PMAP 1", and it is also implemented by Trimble Navigation Systems[11], Yayasan Puter, and Komunitas Konservasi Indonesia (KKI) Warsi[12]. The PMAP 1 activity takes place in two provinces and two districts within each province. There are four core tasks to achieve PMAP 1 outcomes, all of which are included in the PMAP 1 contract:

- Task 1: Participatory Determination, Geo-Location and Physical Demarcation of Village Boundaries, the Mapping of Natural and Cultural Resource Areas within the Villages, and the Creation of Geospatial Databases of the Information Collected (hereafter referred to as Village Boundary Setting/Resource Management, or VBS/RM)[13];
- Task 2: Acquisition of Geospatial Data and Preparation of Geographic Information System (GIS) Databases of Land Use/Land Cover;
- Task 3: Compilation and Geo-Referencing of Existing and Pending Licenses and Permits for Land and Natural Resource Use; and,
- Task 4: Enhancement of District Spatial Plans Through Capacity Building in Spatial Planning, Enforcement and Management of Land Use Information in Spatially Enabled Databases.

[11] For Task 4's Information Management System (IMS) only.
[12] These local organizations support Task 1 only.
[13] This is the only task implemented at the sub-district and village level. All other tasks are implemented at the district level.

[While the evaluation originally covered only PMAP 1, this has been expanded at Stage 2 to cover other PMAPs, see updates in Annex 1 for expansion districts]

This evaluation specifically covers the PMAP 1 portion of the entire PLUP project. PMAP 1 was selected for this evaluation because a) it is the only contract that includes Tasks 1 – 4; and b) it is the only contract that is implemented in locations selected independently of Green Prosperity grant selection. PMAP 1, therefore, offers a unique opportunity to evaluate PLUP as it was originally designed.[14] The evaluation design includes two stages of data collection, the first stage taking place in 2016 and the second stage taking place two years after PMAP 1 implementation (in 2018).[15]

PLUP presents a collaborative mechanism for communities to manage local land and resources. Particularly in the context of developing countries, the participatory nature of land-use planning aims to mitigate the potential for "top-down" imposition of special interests in ensuring sustainable land use, and, ultimately, poverty alleviation. Further, effective PLUP implementation is considered key to balancing development needs with environmental preservation, leading to sustainable management of landscapes. The PLUP approach to Participatory Mapping and Planning combines community engagement with technically advanced hardware and systems to further develop and validate a methodology that is participatory, gender sensitive and dispute sensitive.

ii. Project Stakeholders, Beneficiaries and Implementers

Given the nature of the project to provide strengthening in technical information and practices in spatial planning and governance capacity strengthening, the stakeholders and beneficiaries range across national, provincial, district, sub-district and village levels. The evaluation team (ET) understands the main stakeholders and beneficiaries to be at the national, provincial, district and village levels (see Table 1 below).

[14] It should be noted, however, that the original GP design included PLUP preceding grant projects through the facility, which has not occurred. This will be discussed in the evaluation report.
[15] Evaluation activities for other the GP components will be treated in separate documents.

Table 1: PMAP 1 Stakeholders and Beneficiaries[16]

Level	Stakeholder/Beneficiary
National	National MCA-Indonesia, National Planning and Development Agency (*Badan Perencanaan Pembangunan Nasional*, BAPPENAS), Ministry of Home Affairs, Ministry of Agrarian Affairs and Spatial Planning, Badan Informasi Geospasial, Aliansi Masyarakat Adat Nusantara (AMAN), Ministry of the Environment and Forestry, Ministry of Villages
Provincial	Regional Planning and Development Agency (*Badan Perencanaan Pembangunan Daerah*, BAPPEDA), Governance Division of the Regional Secretariat, Forestry Office, Cash-Crops Office (Dinas Perkebunan), Friends of the Earth, Indonesia (*Wahana Lingkungan Hidup Indonesia*, WALHI), AMAN provincial chapters, Chamber of Commerce and Industry (KADIN), concerned companies, Indonesian Investment and Coordinating Board (BKPMD/A)
District	BAPPEDA, Sekretariat Daerah including Asisten Daerah, Forestry Office, Cash-Crops Office, One-Stop Permitting Office (Perijinan Terpadu Satu Pintu), Land Office (Kantor Pertanahan), Mines and Energy Office, AMAN district chapters, Poros Masyarakat Kehutanan Merangin, Yayasan Bakadisura (Mamasa), and concerned investors
Sub-District[17]	Kecamatan officials, officials of lembaga adat, officials in dispute forums, Village Heads
Village[18]	Village officials, local community/customary leaders, all affected citizens including marginalized and vulnerable groups, women's groups (such as Empowerment Family Welfare, or *Pemberdayaan Kesejahteraan Keluarga*, PKK) and village youth organizations (Karang Taruna) (with many being members of Village Participation Teams (VPTs)).

PMAP 1 has a Jakarta Technical and Administrative Team that is backstopped by Abt Associates, Inc., Home Office Team in Washington, District of Columbia (D.C.) The Task 1, 2/3 and 4 Coordinators are based in Jakarta. Task 1 is the only task that has staff and implementing partners at the district, sub-district and village level. These teams are managed by Abt Associates, Yayasan Puter and KKI Warsi. Task 1 teams include one team leader in each district, one Community Liaison and Coordination Specialist (CLCS) in each sub-district and Social and Communication Facilitators (SCF) that support Village Participation Teams (VPT) in the targeted villages. Task

[16] See the interview guidebook for a breakdown of stakeholders by PMAP 1 Task.
[17] For Task 1 only
[18] *Ibid.*

2/3 and 4 teams are managed by Abt Associates and are based in Jakarta, with the exception of Task 2/3 District Spatial Data Officers who are based in the districts.

iii. Geographic Coverage

PMAP 1 is implemented in four 'starter" districts, two of which are in the province of Jambi and two in West Sulawesi. The initial starter districts are: Merangin and Muaro Jambi in Jambi Province and Mamasa and Mamuju District in West Sulawesi Province. The eight sub-districts that are targeted by the intervention include those listed in Table 2 below. The total number of villages in each sub-district are noted in parenthesis after the sub-district in Table 2.

MCA-I, after the selection of these starter sites, secured Bupati decrees on the formation of Village Boundary Delineation and Demarcation Committees (*Tim Penetapan dan Penegasan Batas Desa*, TPPBD) and Memorandums of Understanding (MOUs). These documents were crucial for Task 1 to immediately commence activities, a process which began with the implementer's contract signing on Jun 30, 2015 (effective date of July 27, 2015). Opening workshops were conducted in each district to officially launch the activities.

iv. Description of Implementation to Date

The ET currently has information from preliminary document review and MCC/MCA-I meetings on project progress through May/June 2016. The ET will receive more current information on village, sub-district, district and provincial progress during initial fieldwork in Jakarta before visiting targeted project locations for data collection.

For the purposes of interpreting project implementation to date, the steps involved in the completion of each Task are described below. Table 2 and Table 3, which describe PMAP 1 implementation as of May 2016 and expected progress as of August 2016, respectively, reference which of the steps in each task have been completed or are expected to be completed. Both tables are informed by program documents and PMAP presentations conducted at MCA-I in the last quarter. Neither of these tables are meant to be exhaustive, though these progress notes have provided the basis for the evaluation approach described below and have influenced the work plan timeline.

Task 1 includes work at the sub-district and village level and was implemented in two phases. Phase 1 included the sub-districts of Jangka Timur and Bonehou. Phase 2 included all remaining sub-districts. Each phase was expected to take approximately six months to complete. Phase 1 VBS/RM included an 18-step process, while Phase 2 VBS/RM roll-out included nineteen discrete steps.[19] The project, as part of this task, also produced a VBS/RM Operations Manual (Operations Manual for the Implementation of VBS/RM). This manual is intended to inform future VBS/RM work in other PMAP 1 districts.

Task 2 and 3 involves the development of a geospatial database in each district that is aligned with national standards. The task includes the following steps:

- Establishment of Interagency Working Group[20]
- Geo-spatial data collection and review
- Legal analysis of regulatory procedures of land administration and natural resource management

[19] See the Project Inception Report and Operations Manual for a full explanation of each discrete step.
[20] The agencies involved in this informal group differs in each district.

- District license/permit collection, compilation, geo-referencing, and map development
- Geo-Database establishment, according to the Indonesian Catalogue of Geographical Elements (*Katalog Unsur Geografis Indonesia,* KUGI) structure
- Informal capacity building (based on results of capacity assessment)

Lastly, **Task 4** involves the development of an Information Management System (IMS) and includes a formal training component. There are three steps to complete this task:

- Design a spatially enabled database (IMS) to integrate land use, land cover and land use licensing information (from Task 1, 2 and 3) to be managed and used at the district level
- Install the IMS in partner districts; and train government partners on how to use the system[21]
- Provision of technical assistance to relevant government entities, primarily at the district level, to improve the ability to conduct transparent and more efficient land use and natural resource licensing and permits
- Enhancement of existing district spatial plans

[21] Both the IMS and the training on the IMS are unique to the context in each district.

Table 2: PMAP 1 Implementation as of May 2016

Task 1

PMAP 1 Implementation			
Province	**District**	**Sub-District (# of villages)**	**Task 1 Progress**
Jambi	Merangin	Jangkat Timur (14)*	Completed through Step 18
Jambi	Mauro Jambi	Kumpeh (17)	Completed through Step 14 Preliminary investigation of boundary disputes completed in April 2016 (9 disputes identified).
Jambi	Mauro Jambi	Kumpeh Ulu (18)	Completed through Step 14 Preliminary investigation of boundary disputes completed in April 2016 (4 disputes identified).
West Sulawesi	Mamuju	Bonehau (9)	Completed through Step 18
West Sulawesi	Mamuju	Kalumpang (13)	Completed through Step 14
West Sulawesi	Mamasa	Mambi (13)	Completed through Step 14
West Sulawesi	Mamasa	Sumarorong (10)	Completed through Step 14
West Sulawesi	Mamasa	Bambang (19)	Completed through Step 14

*Phase 1 sub-districts. During the first six months of project implementation, Task 1 was implemented in only two sub-districts.
Phase 2 included the remaining six sub-districts. Number of villages is still being determined.

In addition to the notes about Task 1 progress in Table 2, the Operations Manual was completed and made publicly available in both English as of June 2016. Additionally, pillars are being placed in all Phase 2 sub-districts during the months of August and September 2016.

Task 2 and 3

PMAP 1 Implementation		
Province	**District**	**Task 2 and 3 Progress**
Jambi	Merangin	Core dataset has been converted into KUGI format. A series of informal trainings were held as a follow up activity to the development of the geo-database.
Jambi	Mauro Jambi	Core dataset has been converted into KUGI format. A series of informal trainings were held as a follow up activity to the development of the geo-database.
West Sulawesi	Mamuju	Core dataset has been converted into KUGI format. A series of informal trainings were held as a follow up activity to the development of the geo-database.
West Sulawesi	Mamasa	Core dataset has been converted into KUGI format. A series of informal trainings were held as a follow up activity to the development of the geo-database).

Task 4

PMAP 1 Implementation		
Province	**District**	**Task 4 Progress**
Jambi	Merangin	One Stop-Shop (OSS) has fully delegated authority from the Bupati to issue both investment (so called Principal permit and location permit) and non-investment licenses/permits. IMS user needs assessment completed. GIS training completed. IMS training developed.
Jambi	Mauro Jambi	OSS has fully delegated authority from the Bupati to issue both investment (so called Principal permit and location permit) and non-investment licenses/permits. IMS user needs assessment completed. IMS training developed.
West Sulawesi	Mamuju	IMS user needs assessment completed. GIS and IMS training developed.
West Sulawesi	Mamasa	IMS user need assessment completed. GIS and IMS training developed.

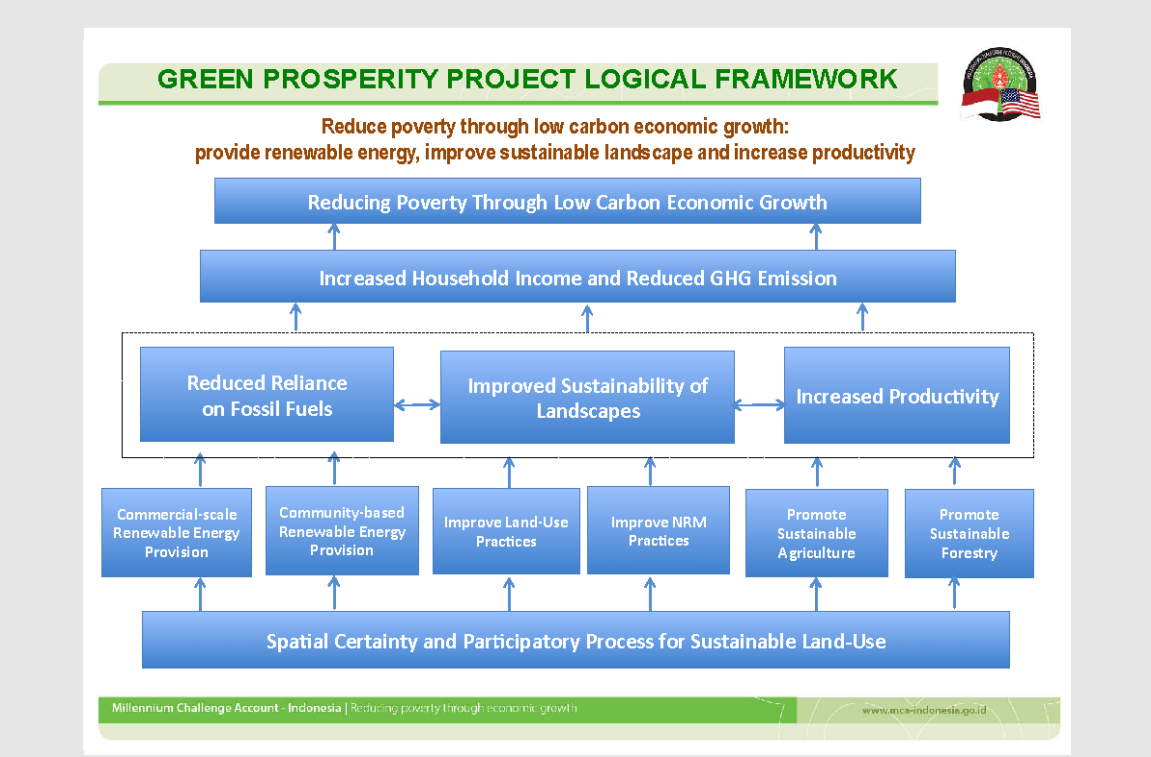
Table 3: Expected Final Activities

PMAP 1 Implementation		
Province	**District**	**Expected progress by September/October 2016**
Jambi	Merangin	Task 1: Remaining steps and installment of pillars in Jangkat Timur. Task 2/3: Analysis of incomplete data continues. Incorporation of Task 1 data, when available. Task 4: Training on IMS to be completed in September
Jambi	Mauro Jambi	Task 1: Remaining steps and installment of pillars in Kumpeh and Kumpeh Ilir Task 2/3: Analysis of incomplete data continues. Incorporation of Task 1 data, when available. Task 4: Training on GIS and IMS to be completed in August and September (respectively)
West Sulawesi	Mamuju	Task 1: Remaining steps and installment of pillars in sub-districts. Task 2/3: Analysis of incomplete data continues. Incorporation of Task 1 data, when available. Task 4: Training on GIS and IMS to be completed in August and September (respectively).
West Sulawesi	Mamasa	Task 1: Remaining steps and installment of pillars in sub-districts. Task 2/3: Analysis of incomplete data continues. Incorporation of Task 1 data, when available. Task 4: Training on GIS and IMS to be completed August and September (respectively).

v. Theory of Change

The GP Project aims to promote environmentally sustainable, low carbon economic growth as set forth in the Government of Indonesia's medium- to long-term development plans. The logical framework presented below outlines the hypothesized linkages between GP inputs and high-order impacts, addressing some of the most critical Indonesian development priorities, including increasing access to clean and reliable energy and improving the stewardship of natural assets.[22]

Figure 1: Green Prosperity Project Logical Framework



The logical framework (Figure 1) presents defined linkages between GP inputs and the ultimate goal of reducing poverty through low carbon economic growth. Specifically, reduced reliance on fossil fuels is the intended effect of GP financing of commercial-scale and community-based renewable energy projects. These projects, paired with participatory land use planning and improved natural resource management practices (represented in the bottom section of the framework, titled 'spatial Certainty and Participatory Process for Sustainable Land-Use"), contribute to more sustainable landscapes. The promotion of sustainable agricultural and forestry practices leads to increased productivity on existing, potentially degraded, land. The confluence of GP activities is thereby expected to reduce greenhouse gas emission and increase household income of beneficiaries.

The PLUP program logic presented in Table 5 identifies two expected impacts that accrue to the local government, individual communities as a group and the individuals of the communities as

[22] Terms of Reference, Government of Indonesia Millennium Challenge Account – Indonesia (MCA-I), Participatory Mapping and Planning Sub-Activity, February 2015.

shown in the PLUP Goal and GP Goal taken from the project Terms of Reference. The evaluation team completed document review, MCC and MCA-I consultations, and a scoping trip[23] to further elaborate and refine the project outcomes that would yield these impacts. This evaluation design report includes the team's recommended outcomes (Figure 2) for tracking PLUP via the PMAP 1 activity, which is elaborated further in the section below. At the time of evaluation design, the ET understands PLUP to be operationalized through PMAP 1. [See Annex 1 for updated Program Logic (Table 5) and outcomes (Table 4) to be measured in Stage 2 for both pilot and expansion districts]

Table 4: Proposed Outcomes for PLUP Activity

Short-term	Long-term
1. Increased public perception of spatial certainty associated with boundaries and land uses within the PLUP villages	7. Accurate and locally accepted spatial and land use data
2. Decreased conflict between villages (or groups of villagers from adjacent villages) over land use rights in "border"/outlying areas between villages	8. Shared understanding of boundaries and various land uses among PLUP geo-spatial partners and communities
3. Improved confidence in land governance administration within PLUP stakeholder partner institutions	9. Greater efficiency in land permitting/licensing processes (licensing transaction costs, license utilization, and license conflicts)
4. Increased capacity of PLUP institutional stakeholders to manage land and external (natural) resources	
5. Improved land use planning, including use of degraded land within PLUP locations	
6. Increased conformance of land use (particularly as measured by new project or uses) to the (new/improved) land use plans	

These outcomes are arranged according to short-term and long-term distinctions, based on the extent results are expected to be (or actually) achieved, with an understanding that many short-term outcomes may more fully develop over time. Short-term outcomes, numbers one through six in the table above, refer to results that are achievable within the timeframe of the project and within one year after completion of implementation. Long-term outcomes, numbers seven through nine in the table above, refer to results that are achievable (or likely to be achieved) one year or more beyond completion of PMAP 1 implementation. The indicator(s) measuring the extent to which outcomes are considered "achieved" and the relative timeframe parameters that define 'short-term" and "long-term" are described in the methodology section below. As noted, data collection will be done in two stages.

[23] An SI team visited Jakarta and Mamuju district, West Sulawesi in January 2015.

Table 5: PLUP Program Logic

Note: The numbers preceding short-term and long-term outcomes relate to the outcome number in Figure 2 above.

PMAP 1 Inputs/Activities	**PMAP 1 Outputs**	**PLUP Short-term Outcomes** (within the project timeframe and one year beyond)	**PLUP Long-term Outcomes** (> one yr. after project finishes)	**PLUP Impact/Goal**	**GP Impact/Goal**
Task 1 Participatory determination, geolocation and physical demarcation of village boundaries and mapping of natural resources.	• Implement the PLUP boundary process (participatory VBS/RM through 18/19 steps) • Create Operations Manual that includes details on: a) Technical Guidance for VBS/RM b) Technical Guidance for Stakeholder Engagement c) Technical Guidance for Village Boundary Dispute Resolution d) Technical Guidance for GNSS Survey e) Technical Guidance for UAV Survey	1. Increased public perception of spatial certainty associated with boundaries and land uses within the PLUP villages 2. Decreased conflict between villages (or groups of villagers from adjacent villages) over land use rights in "border"/outlying areas between villages)	7. Accurate and locally accepted spatial and land use data. (Linked to Tasks 1 and 2) 8. Shared understanding of boundaries and various land uses among PLUP geo-spatial partners and communities. (Linked to Tasks 1 and 2)	Government and other investment projects (GP projects) designed and implemented based on accurate and locally accepted spatial and land use data (spatial certainty and participatory process for sustainable land-use in place)	Increased income of households and businesses
Task 2 Acquisition of geospatial data and preparation of GIS databases of land use/land cover	• Collection of spatial data • Organization and merging of data into KUGI folder structure • Report of data gaps • Stakeholder Registry development, stakeholder engagement, actions and lessons learned	3. Improved confidence in land governance administration within PLUP stakeholder partner institutions.			

PMAP 1 Inputs/Activities	PMAP 1 Outputs	PLUP Short-term Outcomes (within the project timeframe and one year beyond)	PLUP Long-term Outcomes (> one yr. after project finishes)	PLUP Impact/Goal	GP Impact/Goal
PMAP 1 Inputs/Activities	**PMAP 1 Outputs**	**PLUP Short-term Outcomes** (within the project timeframe and one year beyond)	**PLUP Long-term Outcomes** (> one yr. after project finishes)	**PLUP Impact/Goal**	**GP Impact/Goal**
Task 3 Compile and geo-reference existing and pending licenses and permits of land and natural resources use	• Collection of license and permit data for use in the IMS (see Task 4, to be merged with Task 2 data) • Report on effectiveness of land administration and Natural Resource Management (NRM) • Report on analysis and recommendations to streamline the licensing process (to inform development of IMS)	4. Increased capacity of PLUP institutional stakeholders to manage land and external (natural) resources	9. Greater efficiency in land permitting/licensing processes (licensing transaction costs, license utilization, and license conflicts) (Linked to Tasks 3 and 4)		
Task 4 Enhance district spatial plans through capacity building in spatial planning, enforcement and management of land use information in spatially enabled databases	• Institutional assessment of capacity; and IMS user needs assessment • User needs assessment of hardware and software (GIS and database) • IMS design and installation • Development of training module on IMS; completion of training with IMS users • Enhance district planning process by; assessing spatial plans; recommendations for further assistance (gap filling -	5. Improved land use planning, including use of degraded land within PMAP 1 locations 6. Increased conformance of land use (particularly as measured by new project or uses) to the (new/improved) land use plans			

PMAP 1 Inputs/Activities	**PMAP 1 Outputs**	**PLUP Short-term Outcomes** (within the project timeframe and one year beyond)	**PLUP Long-term Outcomes** (> one yr. after project finishes)	**PLUP Impact/Goal**	**GP Impact/Goal**
	equipment, skills, software, etc.);				

3. Cost Benefit Analysis and Beneficiary Analysis

MCC's model of economic analysis for poverty reduction grants provided through United States (U.S.) Government assistance includes the results of Economic Rate of Return (ERR) analysis and Beneficiary Analysis that are made available to the general public through MCC's commitment to transparency and results-based aid. It should be noted that no standalone Cost Benefit Analysis (CBA) was done for the PLUP Activity, therefore there is no existing framework/model on which to base the evaluation work, i.e. no metrics/targets from a CBA to be validated by the evaluation.

The ERR Analysis is used to inform investment decisions based on estimates of the social benefits attributable to the proposed MCC-funded activity relative to the social costs; while the Beneficiary Analysis seeks to describe, to the extent possible, which segments of society will realize the benefits.

An ERR analysis of PLUP would require a monetization and quantitative analysis of project benefits and costs relative to the hypothetical state of affairs in which the project did not exist. It would also require comprehensive data regarding programmatic expenses. The data collection necessary for such an undertaking is outside of the scope of this PE. However, the findings of this PE could facilitate the execution of an end of Compact ERR analysis by clarifying and providing an initial characterization of project implementation and benefit streams. Furthermore, key informant interview (KII) protocols and focus group discussion (FGD) respondents will be designed/selected in such a way that analysis of benefits derived from project activities will be sensitive to how these benefits may be allocated differently across the various beneficiary groups.

4. Literature Review

i. Summary of land and land-use change challenges in Indonesia

A half-century ago, three-quarters of Indonesia was covered by rainforest. Over the past 50 years, Indonesia has prioritized the utilization of natural resources to maximize exports of products such as pulp, paper, coal, nickel, tin, and most recently, palm oil in the pursuit of economic growth. Indonesia's top industries (agriculture, forestry, manufacturing, and construction) are heavily dependent on land and natural resources, which have resulted in widespread deforestation. Economic activities have resulted in a growing middle class and rapid urbanization, which also affects changing land relations. Furthermore, over decades, the nation's rural population in forested areas have become more dependent on agriculture and natural resources for subsistence and income.[24] As a result of these changes and global political-economic shifts, Indonesia replaced Brazil as the world's top deforester in 2012.[25]

Over the last 50 years, Indonesia has also become the sixth highest emitter of greenhouse gases (GHG) at 1,981 Million Metric Tons of Carbon Dioxide Equivalent (MtCO2e)[26] (behind China, the U.S., the European Union, India, and Russia). However, in the Land Use Change and Forestry (LUCF) sector, Indonesia is accountable for 1,220.2 MtCO2e, which is about 44 percent of all

[24] Much of Indonesia's mature/old growth forest has been logged and now is secondary or degraded forest or has been converted to crop forest such as oil palm plantations. Twenty-five years ago, much of Jambi province was natural forest. Millions of hectares of this land are now covered with oil palm plantations, which may still be counted as "forest."
[25] Harball, E. 2014. Deforestation in Indonesia Is Double the Government's Official Rate. Scientific American.
[26] Million metric tons of carbon dioxide equivalent

total global emissions in this sector.[27,28] Indonesia's emissions have increased exponentially and are projected to rise to almost 3.0 gigatons of carbon dioxide by 2020. Almost 80 percent of Indonesia's current GHG emissions stem from deforestation, forest degradation and land use changes, as well as the drying, decomposing and burning of peatland to clear areas for agricultural use. Intentional burning of forests as a cheap land-clearing method to establish oil palm and other plantations has released significant amounts of carbon into the environment. According to a World Bank report, "Daily emissions from Indonesia's fires in October 2015 exceeded the emissions from the entire U.S. economy – that is more than 15.95 million tons of carbon dioxide emissions per day." On a more positive note however, the World Bank states that, "If Indonesia could stop the fires, it would meet its stated target to reduce GHG emissions by 29 percent by the year 2030."[29]

In 2009, as part of United Nations (UN)-backed efforts to mitigate climate change, Indonesia pledged to cut GHG emissions by 41 percent with outside assistance by 2020, making it the largest absolute reduction commitment made by any developing country.[30] In Indonesia, GHG reduction opportunities are found within the forestry and agricultural sectors, where emissions can be minimized by halting deforestation and increasing the rate of reforestation of degraded land. In addition to rising GHG emissions, the increase of concessions developing plantations on non-forest land has the potential to displace local systems of production in areas where property rights are not sufficiently secure, exacerbating local income and food insecurity, and disrupting traditional social relations.[31]

Over half of Indonesia's population live in rural areas and are dependent on agriculture and natural resources for subsistence. Land tenure has always played an important role in development and conservation in the country.

Historically, there has been ambiguity between customary and formal land laws in Indonesia. Under Dutch colonial rule, land was separated into Western freehold systems (private tenure) and state-controlled resources. A third category also emerged through the Dutch ethical policies in which customary (*adat*) land management regimes were recognized under the designation of *hak ulayat* (the rights of avail). Under the rights of avail, local institutional systems were recognized and are often associated with communal land arrangements. Since Indonesian independence, land rights have favored the Western freehold system through the Basic Agrarian Law of 1960 (BAL), which sets forth categories of land use. National land management administration is described in more detail below. However, in the current policy context, situating *adat* as a category within state administration systems continues to be a contested term. A category for *adat* designation was initially created and applied to the national context and derived from the example of the

[27] Hasan, A. 2013. Indonesian province explores "green growth" amidst economic expansion. CIFOR. <blog.cifor.org>

[28]Indonesia National Council on Climate Change. Fact Sheet Norway-Indonesia Partnership REDD+.http://www.norway.or.id/PageFiles/404362/FactSheetIndonesiaGHGEmissionMay252010.pdf

[29]"Indonesia's Fire and Haze Crisis." Published November 25, 2015 Accessible at: http://www.worldbank.org/en/news/feature/2015/12/01/indonesias-fire-and-haze-crisis.

[30] The Intergovernmental Panel on Climate Change (IPCC) has developed three sets of scenarios to predict changes in atmospheric CO_2 levels: the positive, the pessimistic, and the business as usual. The business as usual scenario is the middle ground between the positive and pessimistic extremes. It assumes that population and economic growth rates, as well as nuclear energy costs, will not change significantly in the future. (Climate Change Business Forum, 2014).

[31] Pacheco, P. 2013. Biofuels and forests: Revisiting the debate. CIFOR. <blog.cifor.org>

Minangkabau systems of West Sumatra[32]. This model has struggled to encompass the overall diversity of custom across Indonesia, and *adat* holds multiple meanings in different cultural contexts, and are based on history and local relationships. While customary land rights are still dominant and practiced in many rural areas, land is subject to the government categories, laws, and regulations that political actors choose to apply. Furthermore, the institution of a land registration process is complex and difficult to maneuver, partially due to the complex overlapping regulatory system, but also due to the local customary practices that they take place within.[33] Up to now, there have been competing claims to land and an overall lack of accountability for administering land use. More specifically, each of the PMAP locations will have to contend to the many different factors that shape land relations. These nuances correspond as much to ethnic and cultural heritage as to prevalence of different crops, topography, access to land, credit and other production factors, and the dynamic demand for territory from the state, local communities, migrants, and state-sanctioned concessions.

Broadly speaking, however, land administration at the national level is bifurcated into two different institutions. Indonesia's Ministry of Forestry (recently merged into the Ministry of Environment and Forestry, or MOEF) administers approximately two-thirds of Indonesia's territory, or about 133 million hectares. The MOEF expanded their territorial authority in the 1960s and 70s, appropriating ancestral lands that were previously controlled and used by customary communities. The remaining third of Indonesia's land falls under the administration of the National Land Agency, which is now merged into a Ministry of Spatial Planning and Agrarian Affairs. This Ministry is tasked with land registration databases accounting for APL lands (*Areal Penggunaan Lain*, literally "other land uses"), which encompasses all allowable functions, ownership, and claims for land.

There was a dramatic shift toward political decentralization in 1998, and the resultant devolution of authority led to sub-national actors also contesting their role in land management authority. More claimants on natural resources resulted in extreme pressures on the forest, and Indonesia experienced some of its most dramatic logging during the years 2000 – 2005.[34] Institutional changes toward decentralization created numerous land management challenges by adding complexity to the registration process, obscuring legal requirements, and exacerbating elite capture. Concern for natural resources at the national level continues to be a central area of governance reform, and in particular, recent regulations indicate a pendulum swing towards the "re-centralization" of natural resource management authority to the provincial level.[35]

The national government has taken some steps to address these complex overlapping and contested issues. The President's Office's in particular, under the "One Map" policy, aims to create an authoritative database to help negotiate complex land laws and practices.[36] A core reform of the One Map policy, occurred when Law 4/2011 was passed, which created the Geospatial Information Agency (*Badan Informasi Geospasial*, BIG) and provided the requisite authority to create and administer an

[32] Vel, JAC, and AW Bedner. "Decentralisation and Village Governance in Indonesia: The Return to the Nagari and the 2014 Village Law." *The Journal of Legal Pluralism and Unofficial Law* 47, no. 3 (2015): 493–507.
[33] USAID Country Profile: Property Rights and Resource Governance. Indonesia. 2010. http://usaidlandtenure.net/sites/default/files/country-profiles/full-reports/USAID_Land_Tenure_Indonesia_Profile_0.pdf
[34] Resosudarmo, Ida Aju Pradnja. "Closer to People and Trees: Will Decentralisation Work for the People and the Forests of Indonesia?" *The European Journal of Development Research* 16, no. 1 (2004): 110–32.
[35] Law 23/2014
[36] Began with President Yudhoyono's administration and continues as a central pillar of policy reform in President Widodo's administration.

authoritative source map to which all institutions across the country were beholden. Such an unprecedented move to consolidate mapping authority away from powerful claimants was seen as a major step by activists and administrators as a way to address land conflict and deforestation.

There is also a growing recognition and interest in addressing land conflicts. Official Ministry databases at the Ministry of Home Affairs and MOEF acknowledge conflict, and figures indicate that 16.8 million hectares of land in Indonesia are in conflict, and 1.2 million hectares are "active disputes."[37] The MOEF for example, have created a director-level position to address conflict and customary rights. Furthermore, the *National Law 6/2014*, commonly known as the *Village Law*, also requires villages to play their part in the one map – to participate in clarifying boundaries, legitimizing processes to come to agreement on overlapping land claims and providing development support through additional budgets that support village governance.

Indonesia's tenure reforms are foundational to the ideology of the nation and to the realities of the approximately 140 million people dependent on agrarian practices. Activists lament that close to 70 percent of the country has already been parceled to private concessions, and official statistics also highlight the numerous (and overlapping) approved concessionaires.[38] Vast concession lands remain inchoate however, and the way that tenure security is decided will significantly influence development opportunity for rural communities and the way that natural resources are managed. National policy circles have also seen a growing recognition on tenurial claims based on *adat*, allowing for new pathways to contest historical enclosure on the basis of ancestral lands and customary practices. The Constitutional Court Decision 35/PUU-X/2012 acknowledging customary lands in the vast MOEF Forest Estate provides further signs of improvement that these claims, in a country as diverse as Indonesia, are receiving more legitimate attention.

ii. Gaps in literature

Literature on land tenure interventions – specifically, the provision of land titles – suggests it is a significant channel to achieving positive observable trends in investments, agricultural productivity, and farmer incomes among smallholders. However, contextual realities shape the extent to which these positive outcomes can be observed. From their systematic review of issues surrounding land tenure and its connection to investment and agricultural productivity, Lawry and colleagues assert that "[m]uch of the literature underscores the complexity of attribution and the importance of context to understanding relationships between security, registration and productivity, and to understanding gender dimensions. They also suggest tenure security alone is not a 'silver bullet" leading directly to higher farmer incomes, or that it is solely attributed to tenure reforms– that is, context matters." Contextual issues, including pre-existing level of tenure security and baseline wealth/income levels, will influence the changes in investments and productivity once formal tenure systems are established. Therefore, interventions using land tenure as a driver of increasing income/reducing poverty may have to include other activities; land tenure formalization may need to be part of a larger arsenal of interventions in order to achieve the desired poverty reduction outcomes. This will continue to be an enduring challenge for Indonesia. In the meantime, regarding investment, PLUP seeks to develop an approach whereby clarifying boundaries and addressing boundary disputes will increase trust, transparency, and accountability over land administration practices. Therefore, although land tenure security is not addressed by

[37] Page 14 in McCarthy and Robinson, 2016.

[38] McCarthy, John F, and Kathryn May Robinson. *Land and Development in Indonesia: Searching for the People's Sovereignty*. Singapore: ISEAS – Yusof Ishak Institute, 2016.

these boundary negotiations, a rigorous process that can be understood by multiple stakeholders allows for improvements in acknowledging land uses and ownership.

Most initiatives in Indonesia involved in the LUCF sector assume that clarifying land uses and developing the requisite spatial planning systems will help reduce high rates of emissions from this sector. Early efforts and nearly a decade of Reducing Emissions from Deforestation and forest Degradation (REDD+) implementation however, have fallen well short of expectations due to the context in which such initiatives take place within.[39] The PLUP activity at least administratively, through a theory of change steeped in participatory governance, seeks to reorient lessons learned from efforts at improved land management. Furthermore, PLUP presents the opportunity for connecting green investment as an additional incentive to these reforms. The PLUP starter sites seek to provide timely empirical examples that would showcase the extent to which regularizing processes of land administration, clarification of key boundaries and their processes, capacity building at different scales for improved spatial planning, and incentives to sustainable investments, to collectively provide the mechanisms to initiate a meaningful shift to more sustainable growth.

iii. Policy relevance of the evaluation

The PLUP activity and the overall GP program essentially seeks to support a realignment of Indonesia's economic approach to a less extractive one. The PLUP activity does this at multiple levels, beginning at the local level. Progressive policies for developing accountable mapping and management systems have potentially important effects on local livelihoods, which are highly impacted by the security of, and access to land.

By investing in boundary setting and updating land use inventories and spatial plans, the GP PLUP activity can set a notable example and procedural precedence for pathways to shifting land use change to low-carbon development goals. The PLUP activity seeks to do this by improving perceived and actual land use security, identifying risks for potential investors, developing systems for improving the accountability and sophistication of spatial planning, and consequently increasing the possibility of financing renewable energy projects. "As with all other classes of projects and investment, renewable energy investment becomes more likely and frequent if the perceived levels of investment risk are reduced for a given level of return, or returns are increased for any given level of risk. The impressive growth in sustainable energy investment throughout the last decade in many parts of the world has been triggered by such favorable shifts in risk return."[40] Providing the pathways for connecting global priorities on green investments with the local terms of engagement that PLUP seeks to facilitate, GP has the opportunity to connect sustainable investments with local livelihoods in order to reduce the most intense LUCF GHG in the world.

[39] Luttrell, Cecilia, Ida Aju Pradnja Resosudarmo, Efrian Muharrom, Maria Brockhaus, and Frances Seymour. "The Political Context of REDD+ in Indonesia: Constituencies for Change." *Environmental Science & Policy* 35 (2014): 67–75.

[40] UNEP. 2012. Financing renewable energy in developing countries: Drivers and barriers for private finance in sub-Saharan Africa.

3. EVALUATION DESIGN

A. Evaluation Purpose and Questions

[See updates in Annex 1 for expansion and pilot districts]

The evaluation, as noted above, includes two stages of data collection to evaluate PLUP by focusing on PMAP 1. The phasing of data collection activities is intended to both identify immediate lessons learned in PMAP 1 implementation as well as capture changes in PLUP outcomes over an extended period of time, accounting for long-term effects not readily materialized by the time project activities have concluded. Stage 1 of data collection will take place at the completion of implementation in the four starter districts. Stage 2 will take place approximately two years after Stage 1 data collection, in 2018. The primary purpose of this evaluation in Stage 1 of data collection will be to i) evaluate PLUP outputs and outcomes, and ii) establish an early results assessment of the PLUP outcomes (through recall questions and secondary data). A secondary purpose is to assess the implementation performance of PMAP 1 specifically, in order to inform future PMAP roll-out in other districts. Stage 2 of data collection will identify realized PLUP short- and long-term outcomes (1 through 9) and assess contribution associated with the PLUP project.

The evaluation design presented here attempts to address short-term and long-term primary outcome areas of PLUP (see Figure 2 above). Short-term outcomes are defined as those outcomes/results that are achievable during the timeframe of the project[41] and within one year after project completion[42] (assessed at Stage 1 of data collection); while long-term outcomes are those outcomes/results realized and achieved beyond one year after completion of the project[43] (initially assessed at Stage 1 and again at Stage 2). These longitudinal definitions are relative and will be refined further with MCC and MCA-I regarding their expectations for the realization of results. The evaluation questions and proposed sub-questions, closely linked to the proposed outcomes of PLUP, are detailed in Table 6 below.

[41] Short-term outcomes 1-2
[42] Short-term outcomes 3 through 6.
[43] Long-term outcomes 7 through 9.

Table 6: PLUP Evaluation Questions

PLUP Evaluation Questions		
No.	**Evaluation Question**	**Evaluation Sub-Questions**
1	How has PLUP progressed in the achievement of short-term outcomes, and how is it likely to progress in the achievement of long-term outcomes?	To what extent has PLUP affected perceptions of spatial certainty associated with boundaries and land use, access and control within villages? (Outcome 1)
1	How has PLUP progressed in the achievement of short-term outcomes, and how is it likely to progress in the achievement of long-term outcomes?	To what extent has PLUP contributed to change in the number and/or nature of boundary disputes between villages and with license holders/applicants? (Outcome 2)
1	How has PLUP progressed in the achievement of short-term outcomes, and how is it likely to progress in the achievement of long-term outcomes?	To what extent has PLUP led to increased confidence in land governance within partner institutions (e.g. BAPPEDA and other agencies)? (Outcome 3)
1	How has PLUP progressed in the achievement of short-term outcomes, and how is it likely to progress in the achievement of long-term outcomes?	To what extent have PLUP activities increased the capacity of PLUP institutional stakeholders to manage land and natural resources? (Outcome 4)
1	How has PLUP progressed in the achievement of short-term outcomes, and how is it likely to progress in the achievement of long-term outcomes?	To what extent has PLUP improved practice of and adherence to procedures in land use planning, and the use of degraded lands? (Outcome 5)
1	How has PLUP progressed in the achievement of short-term outcomes, and how is it likely to progress in the achievement of long-term outcomes?	To what extent has PLUP1 affected the level of investment in land use activities consistent with the spatial plan? (Outcome 6)
1	How has PLUP progressed in the achievement of short-term outcomes, and how is it likely to progress in the achievement of long-term outcomes?	How has PLUP impacted settlement boundary dispute processes, and how, if at all, have these agreements changed access to land use? (Outcome 7)
1	How has PLUP progressed in the achievement of short-term outcomes, and how is it likely to progress in the achievement of long-term outcomes?	How has PLUP1 land use data (e.g. designation maps, databases) been shared, used and accepted as a credible baseline by the different levels of government (village, sub-district, district/provincial and national) and between these levels of government and the community thus far? (Outcome 8)

PLUP Evaluation Questions		
No.	**Evaluation Question**	**Evaluation Sub-Questions**
1	How has PLUP progressed in the achievement of short-term outcomes, and how is it likely to progress in the achievement of long-term outcomes?	How has PLUP changed the permitting/license process among government, private sector, and local communities thus far? (Outcome 9)
2	Were achievements toward identified PLUP outcomes varied by geography, community type, or gender and vulnerable/marginalized groups?	Describe project level implementation and engagement at each level (national, provincial/district, sub-district, and village) with women/men, community groups, and vulnerable/marginalized groups.
2	Were achievements toward identified PLUP outcomes varied by geography, community type, or gender and vulnerable/marginalized groups?	Has the identified engagement of these groups (as noted above) influenced the identified results in the area? In what ways?
3	What were the main challenges in managing PLUP?	What were the key barriers to implementation of Tasks 1 through 4?
3	What were the main challenges in managing PLUP?	To what extent did the implementer effectively resolve these issues, and what are means for mitigating implementation challenges in future roll-out areas?
3	What were the main challenges in managing PLUP?	If the PLUP design changed during the last year, what were main reasons for the change? Did the change result in more or less progress toward targeted outputs and outcomes?
4	What were unintended results (positive or negative) achieved on PLUP?	N/A
5	Through what pathways, if any, is increased spatial certainty likely to increase household incomes? What evidence does the evaluation find for this?	N/A

5. Evaluation Design Overview

[See updates in Annex 1 for Stage 2 for expansion and pilot districts]

In determining the most appropriate design for a rigorous evaluation of PLUP outcomes detailed above, the evaluation team considered a number of factors, including sample size and characteristics, implementation constraints, effect heterogeneity and effect sizes, and proposed implementation timeline. Due to concerns around internal validity and power, imposed principally by implementation approach, sample size, and unclear effect sizes, the evaluation team recommends a pre-post qualitative PE approach.

A performance evaluation allows for in-depth exploration of implementation efficacy through qualitative data collection and long-term outcome monitoring. The performance evaluation can be used to refine PLUP implementation and future PMAP contract roll-out while still tracking outcomes over an elongated length of time. A PE can also be used to explore the different types of outcomes that are likely to occur, which is the main objective of this approach.

Of particular note is that Stage 1 of data collection will occur after the implementation of PMAP 1 has started, and in some districts, has neared completion. This timing for Stage 1 of data collection was proposed because prior to the procurement of PMAP 1, there was not an agreed upon articulation of outputs or outcomes related to PLUP. If baseline data had been collected before implementation, there would have been a risk of having to collect additional data after implementation when the outputs and outcomes became clearer. For those outcomes that were clear before implementation, Social Impact (SI) and MCC determined that change would not be detectable in the outcomes until after implementation (for the short- or long-term outcomes). As such, a decision was made to conduct Stage 1 data collection after implementation in the four starter districts. Therefore, Stage 1 is designed to assess early results and change/progress for outcomes 1 and 2 from pre-implementation to post-implementation, and further serve as a "relative" baseline for outcomes 3 through 9. Additionally, Stage 1 will collect lessons from PMAP 1 implementation to provide input to future PMAPs. The ET will also utilize any available pre-intervention secondary data to strengthen pre-post analysis.

The field data collection for Stage 1 will occur from August to October 2016, and for Stage 2 from August to September 2018. The evaluation design for Stage 2 will be the same as outlined in this Evaluation Design Report to verify long-term outcomes. The Stage 2 evaluation design will also be refined as appropriate based on the results obtained through Stage 1. The timeline periods for both Stages are outlined in the work plan (Section 4E).

In the proposed evaluation, qualitative data collection in Stage 1 will occur in the four 'starter" districts and will comprise a thorough review of project monitoring and government data (secondary data and document review), as well as a series of key informant interviews and focus group discussions (primary qualitative data collection) with various project stakeholders across multiple levels of project implementation. Findings will be triangulated against data accessed through public record and in consultation with provincial and district government offices.

i. Methodology

The proposed pre-post qualitative performance evaluation will rely on secondary quantitative and spatial data made available through the PLUP implementing partner(s) and government

stakeholders, as well as primary qualitative data from key informants and focus group participants at the national, provincial, district, sub-district and village levels.

The short- and long-term outcomes of the PLUP evaluation are linked to specific, proposed evaluation questions detailed above. PLUP outputs will be examined to assess the extent they have been produced (and validated) and to the extent they are used by the intended stakeholders/beneficiaries to achieve the desired outcomes. As such, the evaluation questions are structured around the outputs that lead to outcomes to better assess attribution for achieving the project results. An early results analysis will be established on the outcome indicators, captured at time intervals T_0 (pre-PLUP through recall questions), T_1 (Stage 1 of the evaluation) and T_2 (Stage 2 of the evaluation), based on the time at which project outcomes are expected to be realized and observable. Thus, the early measurement for outcomes 1 and 2 will be established using recall questions during Stage 1 of the evaluation, while Stage 1 will serve as the mealy results measurement for outcomes 3 through 9. Early results conditions will be supplemented by further analysis and triangulation with secondary data to attempt to mitigate recall bias. Annex 3 details proposed indicators for tracking progress through to the outcomes. The team has also constructed a general approach to each outcome as detailed in Table 7. Following this table, there is explanation of each data collection approach to be used for the evaluation.

Table 7: Approach to Measuring PLUP Outcomes

PLUP Proposed Outcome Approach		
Outcome Number[44]	**Outcome**	**Approach to identifying indicators/assessing progress**
1 (BL T_0)	Increased public perception of spatial certainty associated with boundaries and land uses within the PLUP villages	To address the issue of perception at the village level, FGDs will be conducted with village stakeholders to understand how spatial certainty has changed over time. The FGD will be formulated with the field level PMAP 1 implementation staff. The design questions can draw out key questions concerning land use, the current land pressures, existing disputes and resolution mechanisms to land boundaries, and how villagers believe their access to land and its spatial certainty has changed over time.
2 (BL T_0)	Decreased conflict between villages (or groups of villagers from adjacent villages) over land use rights in "border"/outlying areas between villages	Evaluating this outcome will require understanding a broad typology of existing village boundary/land conflicts. The project reporting documents already provide data on the number of disputes identified and those that were successfully settled. Interviews will be conducted with the field level PMAP 1 implementation staff to understand the nature of the disputes and the ways that these were successfully/unsuccessfully addressed. This evaluation will seek to understand the processes and types of alternative dispute resolutions in successful cases, the implications of resolution when processes are undertaken, and the causes behind those that are still in conflict. Furthermore, it seeks to provide an understanding about the broader causes of continued boundary disputes.
3 (BL T_1)	Improved confidence in land governance administration within PLUP stakeholder partner institutions	Evaluating this outcome will require a multi-level (national, provincial, district, and community) approach. Interviews must be conducted with national and district level stakeholders to understand the challenges and governance impacts behind boundary-setting processes (e.g. BIG). This will provide insight into the level of effectiveness that regional spatial planning processes are situated within and any feedback mechanisms from the community/increased access to spatial information for community groups, including women and vulnerable groups that will enhance participatory land use and decrease conflict. Furthermore, a close examination of Provincial- and District-level spatial planning administration processes must also take place in parallel. The key area for examination here is whether spatial plans are incorporating boundary setting processes and how such acknowledgement inspires confidence in the planning process. For example, does village boundary acknowledgement result in changes in the overall spatial planning designations (e.g. overlapping permits, claims, etc.)? Also relevant is the agency level of confidence to deal with complex land use matters within departments and in coordination with other agencies.

[44] Includes time interval considered for the early results measurement

PLUP Proposed Outcome Approach		
Outcome Number[44]	**Outcome**	**Approach to identifying indicators/assessing progress**
4 (BL T_1)	Increased capacity of PLUP institutional stakeholders to manage land and external (natural) resources	Assessing land management capacity must be assessed at multiple scales of governance. First, PLUP works closely with core reforms taking place at the village level and supports the capacity to gain agreement on boundaries, especially overlapping claims. Where conflict persists, the approach to resolution at project sites and project interventions to assist such negotiations provides notable indicators of the changing role of local actors involved in land and resource management. Furthermore, the ability of the District government to implement core spatial planning functions of transparency and accountability will be assessed to the extent to which database management systems are incorporated and applied, and their role in licensing/permitting processes. The evaluation will explore how spatial planning is coordinated vertically from the village to the District, and furthermore, how such efforts are being interpreted by core national level land management institutions.
5 (BL T_1)	Improved land use planning and use of degraded land within PLUP locations	Improvement in planning should be evaluated in two ways. The first should look at the way that procedures for planning are followed. Much of this "improvement" will be uncovered from the evaluation of the preceding outcomes, such as the establishment of boundaries and experience of dispute resolution, consideration of degraded lands, and others. Furthermore, improvement can also be evaluated at a broader scale in terms of the adherence to the spatial plans and existing regulations. Improved land use can look at the broader landscape, its natural resource functions, and vulnerabilities for future planning. This will also require identifying lands that are designated as degraded. It is assumed that mapping efforts by the project implementation teams have already developed such maps. These maps should furthermore be able to provide an indication regarding the types of land use classification of these degraded lands. Thereafter, an indication can be made about how spatial planning processes take place for these identified degraded lands, and what types of uses are being planned for these sites.
6 (BL T_1)	Increased conformance of land use (particularly as measured by new project or uses) to the (new/improved) land use plans	The evaluation for conformance begins by looking at a spatial representation of all project interventions and juxtaposing them with actual developed land use planning efforts.

PLUP Proposed Outcome Approach		
Outcome Number[44]	**Outcome**	**Approach to identifying indicators/assessing progress**
7 (BL T_1)	Accurate and locally accepted spatial and land use data	The evaluation will examine the accuracy of the geo-spatial data, through verifying a random sample of sites, and the extent this data is credible and accepted by the lead decision-making institutions that use geo-spatial data, and the relevant communities and civil society members involved in the participatory mapping process. Local acceptability of the village maps will begin during PLUP implementation and culminate with the legally binding decrees. Widespread acceptability would be examined through use of the maps/spatial data at the village level, district level through stakeholder agencies over time. Accuracy can be tested at the village level, with reference to community member perceptions, to see how boundary setting has changed the administration of settled claims in village governments. At the district level, accuracy can be tested through any changes in process and administration that have taken place as part of the process. Data management changes in the administering line agencies also provide verification of the Outcome.
8 (BL T_1)	Shared understanding of boundaries and various land uses among PLUP geo-spatial partners and communities	The evaluation will examine the extent to which a shared understanding of boundaries and various land uses is achieved amongst line agencies and organizations that utilize geo-spatial data. The evaluation will also seek to understand to what extent community members have improved opportunities at accessing spatial data. Although sharing of information will start with communities during PLUP, further sharing of information between line agency institutions is expected to take time as many of these institutions (including the private sector) may be entrenched and not used to a climate of shared information.
9 (BL T_1)	Greater efficiency in land permitting/licensing processes (licensing transaction costs, license utilization, and license conflicts)	It is already a very encouraging sign that site selection was contingent upon Bupatis agreeing to transparency clauses on licenses and permits. [1] The evaluation will examine the types of permits and licenses, as well as any recent plans. Efficiency can be evaluated on a variety of issues. This evaluation proposes to examine permit and licensing beyond the time it takes to finalize a document, but rather the extent to which good governance principles are incorporated. This includes time, safeguards, transparency, dissemination, uses, and oversight. Such an approach provides for the necessary information to evaluate efficiency in a much more comprehensive manner.

Annex 3 includes Key Outcomes, Indicators, Data Sources, Timing, Sample Unit, Instrument, and Data Analysis Method. This matrix details two types of qualitative data collection that the team will employ: Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs). See Table 8 for a list of questionnaires. The matrix also details secondary data collection and document review. See Table 9 for a list of documents and planned secondary data for collection and review. The details below explain how the evaluation team will collect specific quantitative and qualitative data, at both the district and village level, to address the outcomes and related questions.

ii. Qualitative Data Collection

The ET proposes conducting a total of 110 KIIs and six to ten FGDs across the four starter sites. This would allow for discussions with 20 individuals and two groups in each district (and selected sub-district and village), interviews with ten individuals from the provincial level, and 20 interviews with individuals at the national level (including implementing and MCA-I staff). All KIIs will be conducted according to pre-developed and tested interview protocols (see Table 8). The SI team will develop semi-structured interview guides to direct each qualitative data collection activity, and notes from qualitative interviews will be created during field work with daily review to ensure clarity. The team will also record all interviews. Interview notes will be coded for analysis using electronic software (Dedoose) to construct response categories and identify patterns in data, as relevant. Coding qualitative data through use of electronic software, if deemed useful for certain questions or data, will allow the evaluation team to analyze interview notes with speed and efficiency, easily cataloging and documenting emergent themes from among respondents. Final analysis will occur at the conclusion of field work. Further details on proposed coding can be found in the Interview Guidebook.

While the ET expects that some interviews may take place in English, the use of local data collection specialists as well as ex-patriate team members that are culturally and linguistically fluent in Bahasa Indonesia, will allow interviews to be conducted in the national language when necessary.

- **KIIs** will be conducted with MCA-I staff (PMAP 1 and M&E teams); national ministries; provincial, district[45], sub-district and village/community level officials/representatives[46] and implementation counterparts; representatives from community based organizations (CBOs) and research universities active in land use planning and renewable energy projects in the target areas; village level community members; concessionaires/land claimants/businesses; and PMAP 1 implementation staff. Table 8 details the proposed questionnaires to be developed to support qualitative data collection.

  Interviews with district-level key informants will provide qualitative data on documented land disputes, as well as the nature of dispute resolution and expectations of future trends. Additionally, the team will gather information on trends in investment in PLUP areas through the provincial Chamber of Commerce

[45] Informants will be targeted for interviews from the following district-level entities: Kabupaten BAPPEDA (District Planning Agency); National Land Office (BPN); "One Stop" Licensing Office (BPPT); and Ministry of Forestry.

[46] The following entities will be targeted for Key Informant Interviews regarding village-level data: Village Head (Kepala Desa); Sub-District Head (Camat); NGOs, businesses, and Universities conducting community mapping (JKPP).

and Industry (KADIN), the Indonesian Investment and Coordinating Board for Domestic and Foreign Investment (BKPMD/A) and interviews with businesses (select concessionaires and non-concessionaires), and will document ways in which the permitting process has evolved over time. With respect to the permitting process, the ET will specifically explore the number and nature of new permit applications and length of time for permit to be issued, as well as qualitative data on the efficacy of cross-office coordination. Interviews with representatives of BAPPEDA (District Planning Agency) will supplement the team's review of updated spatial plans by clarifying types of permit applications and their conformance to the approved spatial plan, as well as the likelihood of new permit applications for commercial activity and factors contributing to the risk of land-related disputes. Further, through in-depth interviews with the PMAP 1 implementation team and stakeholders across government offices, the evaluation team will assess perceptions of implementation efficacy, whether implementation was participatory in nature, how PMAP contracts might be improved or modified as they are further rolled out, and whether PMAP 1 has actually generated (or exacerbated) existing conflicts.

At the village level, interviews with representatives of local government and community leaders will provide qualitative data on the types of recent border disputes, dispute resolution methods, and perceptions of the effects of PLUP. Village level informants, particularly those involved in the VPT, are also well-placed to provide information on perceptions of permitting transparency and fairness, as well as the extent to which PLUP has been participatory in nature. Additional lines of inquiry include perceptions of land use security and land use change, as well as perceived opportunities for economic investment and the related risk of border disputes. With respect to implementation, interviews will explore whether PLUP engaged with women or other marginalized/vulnerable groups, how PLUP might be improved/modified as it is further rolled out.

In recognition of the parallel efforts of local non-governmental organizations to aggregate and report spatial data, the evaluation team will also conduct interviews with representatives of relevant organizations as an additional source of data on reported disputes, the permitting process, and land use and its conformance to approved spatial plan specifications. Local non-governmental organizations (NGOs) and universities provide the evaluation team an opportunity to corroborate records acquired directly from government offices, as well as to gain a third-party perspective on PLUP activities and their effects across communities and districts.

- **FGDs[47]:** In each starter district, the team will conduct focus groups with local community members to learn perspectives on the nature of village boundary-related disputes, how community members report disputes, how disputes are resolved, and risk factors for future boundary disputes. Through FGDs, the team will also examine perceptions of permitting fairness and ease of acquiring permit, length of time to acquire permit, and barriers to acquiring permits or expanding land for

[47] The following stakeholders will be targeted for focus group discussions: Small-scale farmers (or additional community stakeholders and/or households reliant on forest resources for income; Businesses; and Concessionaires/land claimants.

investment purposes. Smallholder farmers are particularly well-suited to speak to perceptions of spatial certainty, barriers to farmland expansion (such as the ability to obtain use of state forest land or to establish a new settlement or village), and perceptions of commercial potential of unused village land, which provides valuable insight into PLUP's community-level effects. FGDs are also an effective way to learn the extent to which communities felt engaged in participatory planning, and whether PMAP 1 engaged with women or marginalized/vulnerable groups during the process of community mapping.

FGDs are expected to be conducted separately with men and women, where appropriate and will include a broad representation of community members rather than focusing exclusively on those relying on forest resources for income.

Table 8: PLUP Evaluation Qualitative Questionnaires[48]

PMAP 1 Evaluation Qualitative Questionnaires		
No.	**Type**	**Name**
1	KII	Village level community members
2	KII	Village level officials (particularly those in the VPT or dispute resolution forum(s))
3	KII	District and sub-district level officials (line agencies, One-stop Shops-OSS)
4	KII	Provincial level officials
5	KII	National level officials (ministries)
6	KII	MCA-I staff (GP leadership, PMAP 1 management, and GP M&E team)
7	KII	PMAP 1 implementing partners (Abt Associates, Puter, Warsi, and Trimble)
8	KII	NGOs/CSOs/research institutions working in land-use planning and renewable energy projects
9	KII	Concessionaires/Land Claimants/Businesses
10	FGD	Village level VPT
11	FGD	Concessionaire/Land Claimants/Businesses
12	FGD	Training Beneficiaries

[48] Questionnaires will be developed after approval of the Evaluation Design Report, and prior to the team's arrival in Jakarta, Indonesia.

- **Observation** will also be completed in at least one village per sub-district visited by the evaluation team (as it may not be feasible in every village visited). The team will walk along the agreed-upon boundary of the village with members of the community that are available to join. The team will observe if pillars/markers have been erected and discuss the implications of the boundary markers with community members either own those plots or joined the observation activity.
- **Document review** and **collection of secondary data** will include the types of documents listed in Table 9 below. The team will first collect and review PMAP 1 monitoring data. Monitoring data on inputs and outputs, disaggregated by province and ideally district, will be used to review achievement to planned targets and timelines. This data is expected to be collected and managed by the PMAP 1 implementation team as well as the MCA-I M&E team. Indicators expected to be reviewed include: number of village boundaries established; number of district land use, land cover, and permits and licenses inventories publicly available; land area of villages delineated via village boundary setting (VBS); number of villages assisted in participatory boundary setting; and number of enhanced district-level spatial plans. This type of data provides the evaluation team with critical insight into relative successes or pitfalls of PMAP 1 implementation that may be investigated further through key informant interviews and focus group discussions with project stakeholders.

  Following collection and review of M&E data, the ET will attempt to acquire from the relevant offices and ministries data on permit and license applications, changes in designation of agriculture versus forest land, forest concessions, conservation land, and documentation of land-related disputes (to the extent possible).[49] This type of data provides a more concrete view of the extent to which PLUP's intended outcomes, such as reduced land-related disputes and increased transparency and access to land permits, are being achieved. This also provides data to assess the extent of overlapping licenses, use of degraded lands, and conformance with spatial plans, as below. Verifiable records also allow the evaluation team to assess the degree to which PLUP processes and outcomes are publicly demonstrable.

  The evaluation team will also analyze changes to updated spatial plans (if available) with regard to land use to understand if these changes reflect any investment associated with the results of PLUP. The results can then be compared to PLUP's intended objectives and triangulated with public record and qualitative data in order to elucidate factors contributing to changes in land use, investment, and disputes. By the end of PLUP implementation, this type of analysis will also provide indication to the extent provinces, districts, and local communities comply with updated spatial plans for land use.

[49] This may include data from BPN, BAPPEDA (Provincial and District Planning Agencies), Dinas Tata Ruang (Provincial and District Spatial Planning Agencies), Ministry of Environment and Forestry, Ministry of Agriculture, and the "One Stop" Licensing Office (BPPT).

Table 9: Document Review and Secondary Data

PLUP Evaluation Document Review and Secondary Data		
Document Type	**Details**	**Status (as of EDR submission)**
MCA-I Documents	Terms of Reference/Contract	Received
PMAP 1 Implementation Documents	Abt Associates Inception Report; Progress Reports; Reports or Assessments/Studies (as outputs of the program)	Received
PMAP 1 Monitoring Data	Monitoring data on inputs and outputs, disaggregated by province and ideally district (and by sub-district and village for Task 1). Indicators expected to be reviewed include: number of village boundaries established; number of district land use, land cover, and permits and licenses inventories publicly available; land area of villages delineated via village boundary setting (VBS); number of villages assisted in participatory boundary setting; and number of enhanced district-level spatial plans.	Partially received
Indonesian Government Data	Data from BAPPEDA (Provincial and District Planning Agencies), Dinas Tata Ruang (Provincial and District Spatial Planning Agencies) Ministry of Environment and Forestry, Ministry of Agriculture, "One Stop" Licensing Office (*Badan Pelayanan Perijinan Terpadu*, BPPT). To the extent possible, the SI team will acquire from the relevant offices and ministries data on permit and license applications, changes in designation of agriculture versus forest land, forest concessions, conservation land, and documentation of land-related disputes.	Not yet collected/received
Spatial Plans	The evaluation team will conduct a thorough, independent analysis of the degree of detail and specificity each updated spatial plan contains with regard to land use. The results can then be compared to PMAP 1's intended objectives and triangulated with public record data and qualitative data in order to elucidate factors contributing to changes in land use, investment, and disputes. By the end of PMAP 1 implementation, this type of analysis will also provide indication to the extent provinces, districts, and local communities comply with updated spatial plans for land use.	Not yet collected/received
Local news	Local news will be reviewed by the evaluation team (from start of PMAP 1 implementation until current day) to provide information about ongoing disputes or land conflicts.	Not yet collected

iii. Sampling

[See updates in Annex 1 for Stage 2 inclusion of expansion districts]

In order to inform analysis of potential geographic differences in implementation or perceived outcomes, the evaluation team will conduct qualitative data collection in each of the four PMAP

1 starter districts, six of the sub-districts, and eleven villages across all sampled areas. The proposed visits are as follows (in order of planned fieldwork):

- Jambi Province
    - Muaro Jambi District; Kumpeh Ulu sub-district; village of Kasang Pudak
    - Merangin District; Jangkat Timur/Sungai Tenang sub-district; villages of Rantau Suli, Koto Baru and Simpang Talang Tembago)
- West Sulawesi Province
    - Mamuju District; Bonehou and Kalumpang sub-district; village of Mappu in Bonehou and villages of Kalumpang, Karataun, and Kondo Bulo in Kalumpang
    - Mamasa District; Mambi and Bambang sub-districts; villages of Talippuki and Bujung Manurung in Mambi and the village of Bambang Timur in Bambang

We propose conducting qualitative data collection for roughly five days per district, though this depends on the location of sub-districts and villages (in areas where villages are difficult to access the team will spend more time). While a sampling frame has not been finalized at this stage for every stakeholder category and area (finalization is planned for the first three days in Jakarta), this section characterizes the resources the ET will use for the finalization of the sampling frame as well as the prioritization criteria for selecting and sequencing key informants and focus group participants (the sample) at the organizational and individual level. The final sampling frame and the results of the application of the prioritization criteria will be included with the final evaluation report as an annex.

iv. **Development of the Sampling Frame**

KII Sampling Frame: A list of stakeholder organizations and contacts will be acquired from MCA-I staff, project implementers, and ET research on target areas. For private sector concessionaries, contact information will be requested from the implementers. For businesses/non-concessionaires, contact information will be requested from the local Chambers of Commerce, investment boards, and NGOs, and may be pulled from these organizations" member lists. If this information is not available from these sources, the ET will use snowball sampling to identify businesses and concessionaires to speak with per district. Potential respondents in this category will most likely work for companies with activities that require a significant land footprint and are routinely engaged in the land permitting process (e.g. companies active in transportation development, renewable energy, manufacturing, and building construction, and others). The final version of this list may also include additional informants uncovered through snowball sampling during field work.

FGD Sampling Frame: FGDs will be held for three main groups; the village level VPT, concessionaries/businesses (non-concessionaires); and training beneficiaries. FGD participants will be selected from the stakeholder/contact lists provided by the implementers and from the lists of businesses acquired for the KII selection. Concessionaires and business participants will be selected based on a broad representation of their interests/activity, and their knowledge and engagement in the land permitting process.

v. Sampling of Areas, Key Informants and FGD Participants

The selection of sub-districts and villages (listed above) was completed in consultation with PMAP 1 and MCA-I and was also based on the ET's document review and knowledge of each area. While each province and district that the project works in will be visited, the sub-districts and villages (regarding task 1) were selected based on a number of factors: a) to ensure Stage 1 and Stage 2 coverage for Task 1; b) b) to collect information on specific sub-district and village dynamics, for example reliance on "adat" and completed vs. not completed boundary segments; and c) accessibility.

The selection of key informants and FGD participants within each of the sampled districts, sub-districts, and villages; and also, informants at the national and provincial levels will be primarily purposive, with elements of random, snowball, and convenience sampling based on the established sampling frame. There are a number of officials and stakeholder categories that will consistently be selected for KIIs in each area (for example, the Kepala Desa, Camat and the VPT); and there are a number of individuals that will be selected purposively depending on the specific area. Using a stakeholder analysis matrix (see section below), stakeholders will be prioritized and sequenced for KIIs according to their support for and influence over the project. Meanwhile, convenience sampling will be used to identify community respondents, while concessionaire and business FGD participants will be prioritized according to their knowledge of and engagement in the land permitting process. The selection of FGD participants may be subject to convenience or snowball sampling in the event that some village-level participants are difficult to contact for participation in the evaluation. Lastly, initial KIIs may yield new informants of interest in each area that may selected in a snowball sampling methodology.

For example, in Muaro Jambi, the team will interview staff from BAPPEDA (Head of Bidang Fispra) and the OSS (Secretary and Head of Monitoring Division); while in Merangin, the team will interview staff from Dinas Kehutanan dan Perkebunan (DISHUTBUN) in addition to BAPPEDA and OSS staff. This is because spatial data in the district of Merangin is dispersed across BAPPEDA, OSS and DISHUTBUN where in Muaro Jambi, PMAP 1 worked with BAPPEDA and OSS to aggregate necessary spatial data. Additionally, in Muaro Jambi, the team will conduct a focus group discussion with land claimants, as there are many in this district (as indicated by PMAP 1 staff). Two additional focus groups are planned in the district: one with the VPT in the village of Kasang Pudak and one with training participants from the recent IMS training (August 21 – 26, 2016). All members of the VPT will be invited to participate in the focus group, while the ET will randomly select five-six training participants to join a discussion group. Lastly, KIIs will also be conducted with implementing partner staff (CLCS, SCF, Team Leader), the Kepala Desa from Kasang Pudak, and with the Kumpeh Ulu Camat. While there are no specific stakeholders that the project engaged at the provincial level in Jambi[50[1]], the ET will interview the Green Prosperity Relationship Manager (Dasri Erwin) for the province to cross-check findings and identify any possible informants at the province level.

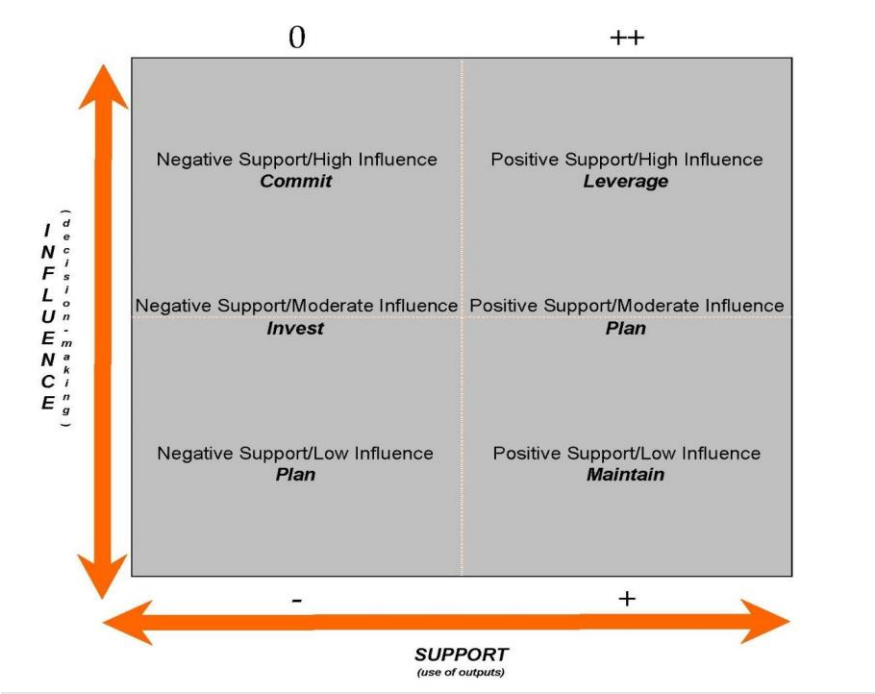
[50[1]] This differs from West Sulawesi where the team will speak with BAPPEDA at the provincial level, considering the province's engagement with Tasks 2 – 4.

Initial Stakeholder Analysis

In order to move from the sampling frame to a sample for each area and stakeholder category (as exemplified above for Muaro Jambi), a stakeholder analysis was conducted to identify and manage stakeholder engagement (see Figure 3). The stakeholder analysis uses information gathered during the document review, and preparatory discussions and meetings with MCC and MCA-I. This analysis assists in prioritizing key stakeholders for the KIIs and FGDs in each area, and further informs the evaluation timeline for the ET's engagement with the stakeholders. Given the many stakeholder groups and levels, and the limited time and resources for the evaluation, it is not feasible to engage with all stakeholders at an equal level of inquiry across the four districts.

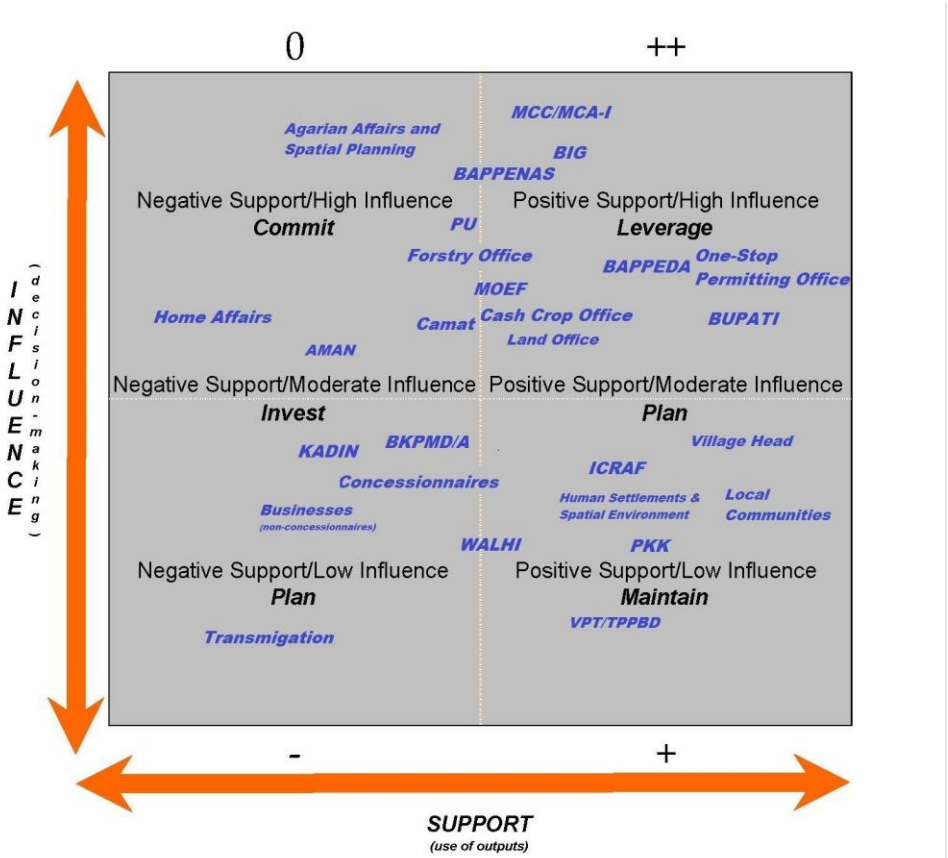
A stakeholder matrix in Figure 3 shows quadrants of stakeholder roles along an X- and Y-axis for denoting support (use of the outputs) and influence (decision-making) for PLUP, respectively. Figure 4 is illustrative of the relative placement of the stakeholders according to the ET's preliminary assessment (including broad categories of stakeholders only). The "movement" of stakeholders along the X- and Y- axis of support and influence could change as informed by the KIIs and FGDs. The evaluation team will be strategic in engaging the project stakeholders by seeking representation from all four quadrants, with particular attention to those stakeholders that are highly influential and supportive in driving PLUP to achieve its outcomes (short-term and long-term), which provides some inference on the sustainability of the project. As such, in deceasing order of priority, stakeholders will be engaged in the following quadrants: upper right, lower right, upper left, and lower left. As noted above, this will vary by district (and sometimes by sub-district and village), and so this exercise will be used at various levels to assist in confirming respondents.

Figure 2: PLUP stakeholder matrix[51]



[51] Based on Toby Elwin's – 'scope or: how to manage projects for organization success; stakeholder analysis template" https://tobyelwin.com/stakeholder-analysis-template/

Figure 3: Illustrative placement of stakeholders implementing PLUP



vi. Gender Strategy

Consistent with MCC's evaluation guidelines and recognizing that effects of integration and the success of the project might vary across gender (and other identified minority or vulnerable groups), the evaluation team will apply a gender responsive lens during all evaluation activities described in this Evaluation Design Report. This strategy includes explicit and implicit steps.

The gender-responsive design includes the sampling and interviewing of both men and women (interviewed in separate groups where needed). All data collection methodologies (both KIIs and FGDs) will consider the privacy and confidentiality of respondents as well as include gender responsive questions. The evaluation team will include these gender-specific questions in interview guides with all relevant stakeholder groups in order to evaluate the potential differential impacts of PLUP implementation on males and females (and other identified minority or vulnerable groups). Gender-sensitive data - such as knowledge, traditional practices and norms (e.g. for land dispute resolution mechanisms, if any) - will be presented where applicable, along with data disaggregated by sex. The team will also ensure that interviews and focus groups are conducted at times and places accessible to both men and women equally. Lastly, evaluation team members, comprised of a local data collection specialist and three expatriate members, are culturally and linguistically fluent in Bahasa Indonesia and will be able to capture nuances during interviews/discussions conducted in the national language.

Steps considered implicit include the framework with which the team will approach the assignment, and each district in turn. During document and data review and primary data collection, the evaluation team will use the below questions as a way to ensure various aspects of gender analysis are considered. Though these questions are not included in the questionnaires, they will influence how the team approaches and seeks to learn about each area and, in turn, the PLUP project within it:

- Do policies (and institutional practices) contain explicit or implicit gender bias in this area?
- How have cultural norms and beliefs influenced the way PLUP has been implemented?
- Is there evidence of an impact of division of labor in each area on program participation (and ultimate outcomes)?
- Who has access to and control over assets and resources in each community (particularly land)?
- How have patterns of power and decision-making (ability to decide, influence, and exercise control over resources) in each area affected participation in and ultimate outcomes of PLUP?

6. Limitations and Threats to Validity

The evaluation design focuses on *ex post* identification of areas of significant change and exploring attribution and mechanisms of changes through qualitative data. Accordingly, the absence of a valid counterfactual against which to compare intervention effects limits the team's ability to determine attribution of observed effects to project inputs alone. Additionally, the recent and planned imposition of national and provincial administrative reforms presents a confounding factor that further complicates the team's ability to disentangle the independent effects of PLUP. The evaluation will, however, provide an opportunity to identify important changes and identify and assess potential mechanisms of change, which could inform future evaluations of similar projects.

By completing Stage 1 of data collection near the end of implementation of PMAP 1, the evaluation will be limited in its ability to fully describe and explain pre-PLUP contexts for each outcome. Though the evaluation team will mitigate this threat using recall questions and pre-PLUP secondary data (when available) in Stage 1 (particularly for outcomes 1 and 2), this timing will limit how clearly the evaluation can identify "changes occurred" and correlation with the intervention in Stage 1. Stage 2 will further mitigate this threat by introducing a second round of data that can be analyzed against Stage 1 data to determine changes in outcomes (both short and long-term). As detailed above, however, this timing was preferred when compared to a pre-implementation data collection effort because outcomes were not articulated and finalized at that stage. For most of the outcomes identified in this report, Stage 1 serves as a baseline, so full description of the "baseline" contexts is possible.

The results of this evaluation will be generalizable to the starter districts in which PMAP 1 was implemented. The results will be generalizable to the other PMAP districts with caution; this is due to the sampling of districts for this evaluation (selected for reasons noted above and not at random), and to the fact that most of the PMAP contracts do not implement Task 1 (as mentioned earlier in section 2a.i.).

The first stage of the proposed PE relies heavily on the availability of a variety of government data, including records of land permits, business licenses, and border disputes. The team

understands this data may be housed in different levels of government (i.e. national offices, provincial offices, etc.) and is likely to exist in paper form. Uncertainty surrounding the team's ability to access key documents poses a challenge to the proposed data extraction phase. The team will work closely with MCA-I and the project implementers to coordinate requests for data and the limitation of data collection to partner areas increases the likelihood of cooperation from government officials in accessing data.

The team acknowledges two inherent biases associated with the proposed qualitative data collection. One limitation is the possibility of recall bias among key informants. The team will take steps to reduce recall bias in the protocol design phase, including framing questions to aid accurate recall. Where possible, the team will corroborate interview findings with additional data sources, such as government records. The team also acknowledges the potential for bias due to the subjectivity of respondents and the possibility of collecting only socially desirable responses from interviewees. In order to address this potential bias, the SI team will purposively recruit a diverse sample of informants and triangulate responses with other data sources in addition to developing data collection protocols based on best practices that minimize response bias. Since the team will not be able to avoid all bias in the data, persistent biases will be accounted for in the analysis phase and noted, where applicable, in the discussion of results of the final report.

4. ADMINISTRATIVE

[See updates in Annex 1 for Stage 2 revisions to the clearance process, dissemination plans, evaluation team and timeline]

A. Summary of IRB requirements and clearances

In conjunction with MCC's commitment to respect and follow the Common Federal Policy for the Protection of Human Subjects where feasible, SI will pass the approved evaluation design through IRB review prior to data collection. SI has a fully functional Institutional Review Board (IRB), with established protocols for gathering informed consent, protecting anonymity and identifying information, and ensuring ethical data collection—including from children and other vulnerable populations. As standard practice, SI will collect any identifying information together, and immediately separate from additional data collected such that only a small number of approved researchers can link responses to their source. SI's evaluation team has similar established protocols for anonymizing datasets for presentations. SI's internal IRB is registered with the U.S. Department of Health & Human Services Office for Human Research Protections. In addition, SI closely monitors and adheres to human subject research regulations in its countries of operation to ensure all evaluations are registered and fully compliant with local law.

7. Data Protection and Preparation of Data Files for Access, Privacy and Documentation

The privacy of all participants who take part in the data collection will be respected throughout the evaluation. To maintain confidentiality and to protect the rights and privacy of those who participate in the PMAP 1 evaluation, data files will be free of identifiers that would permit linkages to individual research participants and will exclude variables that could lead to deductive disclosure of the identity of individual subjects. Further, the qualitative research methods will be designed to protect subjects and guarantee confidentiality in order to maintain the integrity of the data collection among these groups while minimizing non-response. Transcripts and identifying information will be stored in password-protected folders and will not be made publicly available.

Once data collection is complete for a given stage of the evaluation, SI will generate a final report and datasets. These materials will be shared with MCC and key stakeholders for review and comment before drafts are finalized. SI will present and share documents with MCC, MCA-I, and other stakeholders as outlined in the Dissemination Plan included below. Raw datasets provided will follow the MCC Data Documentation and Anonymization Requirements. Complementary Stata do files will also be provided to permit replication of SI's data analysis. Data will conform to the documentation requirements outlined in the contract. In line with MCC's emphasis on transparency, the findings and data will be shared with the broader donor and development community, contributing to the global knowledge pool and amplifying the utility of the evaluation.

8. Dissemination Plan

With every evaluation that SI conducts, we develop and implement a communication plan for enhancing the utilization and visibility of the results through our Evaluation Quality, Use, and Impact (EQUI™) approach, especially to evaluation beneficiaries and stakeholders. SI's communications plan for the PLUP evaluation will articulate an understanding of the specific

context and target audience and how to reach them, research into past communications efforts and public opinion about the issues, the messages to be delivered, the mediums and messengers through which it is communicated, materials to be produced, and financial resources from which staff and equipment will be drawn. It is not only important that the evaluation answers the evaluation questions, but also that those findings translate into policy actions by MCC, MCA-I, and other stakeholders. SI proposes to establish a robust utilization plan to maximize use of the evaluation findings. SI's approach to evaluation draws on utilization-focused methodologies to help build capacity and to ensure that the information generated by the evaluation is genuinely useful to MCC. Following the finalization of baseline, midline, and endline reports, SI's senior technical staff will facilitate results dissemination and utilization workshops with key stakeholders at MCC's headquarters in Washington, D.C., and potentially at MCA-I in Indonesia. The team will also propose a debrief meeting before fieldwork closes for each stage of data collection to better capture input from key stakeholders (MCA-I, MCC and the implementer) and to more closely involve stakeholders in the evaluation process.

9. Evaluation Team Roles and Responsibilities

SI proposed a staffing structure of three qualitative international evaluators, in addition to a local field researcher (Research Assistant) tasked with assisting data collection. The team leader will supervise the evaluation team's work, with overall guidance and technical input from SI's home office staff. He is assisted by a program evaluation specialist and a GIS/land use specialist. All international specialists have extensive experience working in Indonesia with government, private sector, NGOs and local communities. The team's local field researcher joined the team prior to the launch of the fieldwork, though the three qualitative evaluators had already been identified and have developed this work plan.

10. Evaluation Timeline and Reporting Schedule

As mentioned earlier, the evaluation team proposes two Stages of data collection for this performance evaluation. Stage 1 will be conducted immediately following PMAP 1 implementation in starter districts and will primarily focus on implementation successes and challenges and use respondent recall and project documents to record a baseline for key outcomes. For Stage 2, data collection will commence two years following PMAP 1 completion and will focus on identifying changes in key outcomes. The data collection activities will commence with a thorough document review and initial interviews with MCA-I and Implementers, which will inform the development of a detailed evaluation work plan. As part of the work plan, the evaluation team will develop data collection tools and a sampling plan. During field work, the team work together in each of the four districts over a timeframe of approximately 3.5 weeks. The team will end in Jakarta to aggregate and analyze data, and to prepare for the presentation of initial findings to MCC/MCA-I and the implementer (if possible). The team will then develop a draft report for review. Upon incorporating feedback, the evaluation team is expected to submit a final Stage 1 evaluation report and corresponding data in December 2016.

SI will submit the following evaluation deliverables for Stage 1:

- **Evaluation Design Report**
- **Performance Evaluation Work plan** following review and discussion with MCC

- **Qualitative Data Collection Protocols and Tools** following review and finalization of the evaluation work plan
- **Debrief Presentation to MCA-I and MCC** conducted in Jakarta (and Washington by the SI Project Manager) (expected 1-1.5 hours) after conclusion of fieldwork and prior to departure of the evaluation team from Indonesia
- **Data** anonymized and in note form for the qualitative data collected.
- **Draft and Final Stage 1 Evaluation Report** within four weeks of conclusion of field data collection and within one week of MCC feedback, respectively (expected approximately 25 pages plus annexes)
- **Presentation to MCC on Findings, Conclusions, and Lessons Learned** conducted after the submission and approval of the final evaluation report

Stage 2 will use the same evaluation design with refinements based on the findings of the Stage 1 evaluation report. The deliverables for Stage 2 include:

- **Revised Evaluation Design Report** based on findings from the Stage 1 evaluation report
- **Revised Performance Evaluation Work plan** following review and discussion with MCC
- **Qualitative Data Collection Protocols and Tools** (tweaked as necessary based on the experience of Stage 1 and new circumstances on the ground)
- **Debrief Presentation to MCA-I and MCC** conducted simultaneously in Jakarta (and Washington by the SI Project Manager) (expected 1-1.5 hours) after conclusion of fieldwork and prior to departure of the evaluation team from Indonesia
- **Data** anonymized and in note form for the qualitative data collected
- **Draft and Final Stage 1 Evaluation Report** within two weeks of conclusion of field data collection and within one week of MCC feedback, respectively (expected approximately 25 pages plus annexes)
- **Presentation to MCC on Findings, Conclusions, and Lessons Learned** conducted after the submission and approval of the final evaluation report

An outline of the evaluation timeline and reporting is presented in Table 10.

Table 10: PMAP 1 Evaluation Timeline and Reporting for Stage 1 and Stage 2

PMAP 1 PERFORMANCE EVALUATION TIMELINE – Stage 1, 2016			
Start Date	**End Date**	**Task**	**Location**
22-Jul	19-Aug	EDR Update- includes draft submission to MCC, MCC review and Team revisions, finalize as necessary instruments and guides	Home office
26-Jul	25-Aug	Field mission prep-logistics, national researcher recruiting, etc.	Home office
26-Aug	1-Oct	Evaluation field mission	Indonesia
26-Aug	28-Aug	Mobilization to Indonesia	Travel
29-Aug	30-Aug	Team planning meeting and MCA-I Stage 1 introduction	Indonesia

29-Aug	24-Sep	Site data collection *-Jakarta (Aug 29-Sep 2)* *-Jambi (Sep 3-Sep 13)* *-Midpoint check-in (Sep 13)* *-Sulawesi (Sep 14-24)*	Indonesia
25-Sep	29-Sep	Data cleaning and analysis, final meetings with relevant stakeholders in Jakarta	Indonesia
30-Sep	30-Sep	Debrief with MCA-I	Indonesia
01-Oct	01-Oct	Demobilization	Indonesia
3-Oct	21-Oct	Draft Stage 1 evaluation report	Home office
22-Oct	28-Oct	Submit draft Stage 1 evaluation report to MCC	Home office
29-Oct	11-Nov	MCC/MCA-I review process	Home office
12-Nov	30-Nov	SI complete revisions to evaluation report	Home office
1-Dec	9-Dec	MCC/MCA-I final review process	Home office
16-Dec	16-Dec	SI presents and submits final Stage 1 evaluation report	Home office/ Washington

PMAP 1 PERFORMANCE EVALUATION TIMELINE – Stage 2, 2018[52]			
Start Date	**End Date**	**Task**	**Location**
22-Jul	19-Aug	EDR refinement based on Stage 1 evaluation results and discussion with MCC	Home office
26-Jul	25-Aug	Field mission prep-logistics, national researcher recruiting, etc.	Home office
26-Aug	1-Oct	Evaluation field mission	Indonesia
26-Aug	28-Aug	Mobilization to Indonesia	Travel
29-Aug	30-Aug	Team planning meeting and MCA-I Stage 1 introduction	Indonesia
29-Aug	24-Sep	Site data collection *-Jakarta (Aug 29-Sep 1)* *-Jambi (Sep 2-Sep 12)* *-Midpoint check-in (Sep 13)* *-Sulawesi (Sep 14-24)*	Indonesia
25-Sep	29-Sep	Data cleaning and analysis, final meetings with relevant stakeholders in Jakarta	Indonesia
29-Sep	29-Sep	Debrief with MCA-I	Indonesia
01-Oct	01-Oct	Demobilization	Indonesia
3-Oct	13-Oct	Draft Stage 2 evaluation report	Home office
14-Oct	14-Oct	Submit draft Stage 2 evaluation report to MCC	Home office
15-Oct	30-Oct	MCC/MCA-I review process	Home office
31-Oct	15-Nov	SI complete revisions to evaluation report	Home office
16-Nov	1-Dec	MCC/MCA-I final review process	Home office
9-Dec	9-Dec	SI presents and submits final Stage 2 evaluation report	Home office/ Washington

[52] Indicative timeframe.

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ANNEX 1: EVALUATION DESIGN CHANGES (REVISED MAY 2021)

In July 2016, SI developed Version 1 of this Evaluation Design Report for the Stage 1 evaluation of pilot districts (finalized in November 2016). In September 2018, MCC contracted a revised scope of work that included updating the design and related research questions.

Per the evaluation SOW this includes:

1. Extension of the time period for follow up evaluation of the pilot areas by an additional three years (2021)[53] depending on district and provincial level land use planning timelines;
2. Extension of the evaluation to include expansion districts (beyond PMAP 1);
3. Consideration of geospatial and land administrative data to track progress in both pilot and expansion areas of interim and longer-term high level/big picture results. Big picture outcomes refer to a) incorporation of village level boundaries and land resource use mapping into government tools for national land administration, particularly district level land use plans and One Map Initiative (under Outcome 8[54]), b) sustainability of investments including upkeep and utilization of licensing and permits databases and related IMS in the districts and provincial land offices (under Outcome 4), c) improved land use administration and allocation decisions (under Outcome 9) in line with adherence to these land use plans, resource maps (including mapping of villages and critical peatlands) and improved IMS systems (under Outcome 4, 5 and 9), d) changes in investments (Outcome 6) and, e) related land use changes, especially as it relates to improved land utilization of degraded lands (under Outcome 5), management of natural resources and avoidance of loss of high carbon value areas that are the leading contributor to Indonesia's GHG emissions (up to ten years), and;
4. Verify output/performance data for expansion districts since the close of the compact.

To the extent feasible this annex mirrors the outline of the original report as follows: We start with brief update on implementation. Next, we provide an update of the PLUP Theory of Change and then focus on updates to Section 3 on the evaluation design including the inclusion of the expansion districts and the selected sample, revised evaluation questions aimed at capturing short- and medium-term outputs, a description of how the interim report will address the potential of a future evaluation on long-term outcomes, and Stage 2 data sources. Finally, we conclude with updates to Section 4, administrative changes to the evaluation at Stage 2.

This annex was originally updated in late-2019 and approved by MCC in 2020. Further revisions were made in May 2021 in response to the COVID-19 pandemic, primarily a shift to remote data collection when feasible to protect the evaluation team, respondents, and participating communities. COVID-19 revisions have been highlighted in the following text.

[53] The original extension was for two years but due to COVID-19, data collection was delayed until 2021.

[54] Note that for this and other outcomes noted in this paragraph, the TOC has been updated since the SOW drafting. See below for updated outcome numbers.

A. Overview of the Compact and the Interventions Evaluated

i. Project Description

Since the original EDR was finalized, the MCC Indonesia Compact Agreement with the GOI has ended. By Compact close the GP Project had spent $288 million of the approximately $317 million budgeted. Concentrated in provinces and districts which have the highest potential for achieving poverty alleviation and environmental objectives, GP conducted four discrete activities, the Participatory Land Use Planning (PLUP) Activity, the GP Facility Activity, the Technical Assistance and Oversight Activity, and the Green Knowledge Activity. The design of PLUP was to inform investments from the rest of the GP programming; however, in practice, implementation of PLUP occurred in parallel to the rest of GP.

By the end of the compact, PLUP had been implemented in 40 districts (11 provinces) across Indonesia. While pilot sites under PMAP 1 received Task 1-4 in expansion districts 23 districts received Tasks 2 – 4 only; and no districts received only Task 1. The tables below describe the geographic coverage, tasks, implementers, and timelines of these PMAP contracts. See Table 11 for a breakdown of implementers by province and district, as well as tasks delivered. Table 12 includes a Gantt chart of PMAP contract timelines during GP.

Table 11: PLUP by province, district, contract, task, and implementer

		PMAP 1	PMAP 2	PMAP 3	PMAP 4	PMAP 6	PMAP 7	PMAP 8
	Task	*Tasks 1 - 4*	*Tasks 2 - 4*	*Tasks 2 - 4*	*Tasks 2 - 4*	*Task 1*	*Tasks 2 - 4*	*Task 1*
	Implementer	*Abt*	*LEI*	*LEI*	*Niras*	*Abt*	*LEI*	*Niras*
Province	**District**							
Southeast Sulawesi	Kolaka			X				
Southeast Sulawesi	Kolaka Timur			X				
Southeast Sulawesi	Kolaka Utara			X				
East Kalimantan	Berau				X			
East Kalimantan	Mahakam Ulu				X			
East Nusatenggara	Sumba Barat Daya		X					
East Nusatenggara	Sumba Barat		X					
East Nusatenggara	Sumba Tengah		X					
East Nusatenggara	Sumba Timur		X					
East Nusatenggara	Ende			X				
East Nusatenggara	Sikka			X				
East Nusatenggara	Flores Timur			X				
Jambi	Merangin	X						
Jambi	Muaro Jambi	X						
Jambi	Tebo				X			
Jambi	Tanjung Jabung Timur		X					
Jambi	Kerinci*		X					
North Kalimantan	Malinau				X			
Riau	Rokan Hilir						X	X
Riau	Rokan Hulu						X	X
Riau	Pelalawan						X	X
Riau	Kampar						X	X
Riau	Kuantan Singingi						X	X
South Sulawesi	Luwu			X				
South Sulawesi	Luwu Utara			X				
South Sulawesi	Luwu Timor			X				
West Kalimantan	Kapuas Hulu				X			
West Kalimantan	Sintang				X			
West Nusatenggara	Lombok Barat				X	X		

		PMAP 1	PMAP 2	PMAP 3	PMAP 4	PMAP 6	PMAP 7	PMAP 8
	Task	*Tasks 1 - 4*	*Tasks 2 - 4*	*Tasks 2 - 4*	*Tasks 2 - 4*	*Task 1*	*Tasks 2 - 4*	*Task 1*
	Implementer	*Abt*	*LEI*	*LEI*	*Niras*	*Abt*	*LEI*	*Niras*
Province	**District**							
West Nusatenggara	Sumbawa Barat				X	X		
West Nusatenggara	Lombok Utara		X			X		
West Nusatenggara	Lombok Timur		X			X		
West Nusatenggara	Lombok Tengah		X			X		
West Sulawesi	Mamuju	X						
West Sulawesi	Mamasa*	X						
West Sulawesi	Majene			X				
West Sulawesi	Polewali Mandar			X				
West Sumatra	Solok Selatan				X	X		
West Sumatra	Pesisir Selatan				X	X		
West Sumatra	Dharmawraya				X	X		

Remote locations noted with an *.

Red text = no task 1.

Table 12: PMAP Contract Timelines

	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
PMAP 1																																																	
PMAP 2																																																		
PMAP 3																																																	
PMAP 4																																																	
PMAP 6																																																	
PMAP 7																																																	
PMAP 8																																																	

ii. Project Stakeholders and Beneficiaries

Utilizing information learned from Stage 1 and the Stage 2 scoping trip the ET has expanded upon Table 1 in this report by adding additional detail and updating the list of project stakeholders/beneficiaries (see Table 13 below). New additions from the original EDR are underlined.

Table 13: PLUP Stakeholders and Beneficiaries

Level	Stakeholder/Beneficiary
National	• **BAPPENAS** (ex-Satker and spatial planning unit) • **Ministry of Home Affairs** (Village Governance Support Unit) • **Ministry of Agrarian Affairs and Spatial Planning (ATR/BPN)** • **Badan Informasi Geospasial** (Center for village boundary administration mapping (PPWB), Data Center, Center for thematic integration mapping (PPIT), Center for geospatial data outreach (PPIG)) • **Jaringan Kerja Pemetaan Partisipatif (JKPP)** • **Ministry of the Environment and Forestry** • **Ministry of Villages** • **National Investment Board (BKPM)** • **One Map Policy Office at the Coordinating Ministry for Economic Affairs (CMEA)** • **MCA-I ex staff and contractors** • **World Bank**
Provincial	• **BAPPEDA** • **One Map/One Data Centers at the Provincial Government Offices** • **Governance Division of the Regional Secretariat** • **Forestry/Agriculture/Plantation/Tourism/Mining offices** as appropriate • **Concerned companies** • **Regional Investment and Coordinating Board (BKPMD)** • **Public Works** • **Communications agency** • **Related NGOs and indigenous associations at provincial levels** • **MCA-I ex staff and contractors**
District	**BAPPEDA** • **Forestry/Agriculture/Plantation/Tourism/Mining offices** as appropriate • **One-Stop Shop Permitting Office** (Perijinan Terpadu Satu Pintu), and **concerned investors**, • **TPPBDes** / mapping task force (where applicable) • **Related NGOs and indigenous associations at provincial levels** • **Company offices** relevant in local contexts as applicable, • **MCA-I ex staff and contractors**
Sub-District[55]	**Kecamatan officials, officials of lembaga adat as applicable, officials in dispute forums**
Village[56]	**Village officials, local community/customary leaders, all affected citizens including marginalized and vulnerable groups, VPTs, women's groups (such as PKK) and village youth organizations (Karang Taruna), customary leaders.**

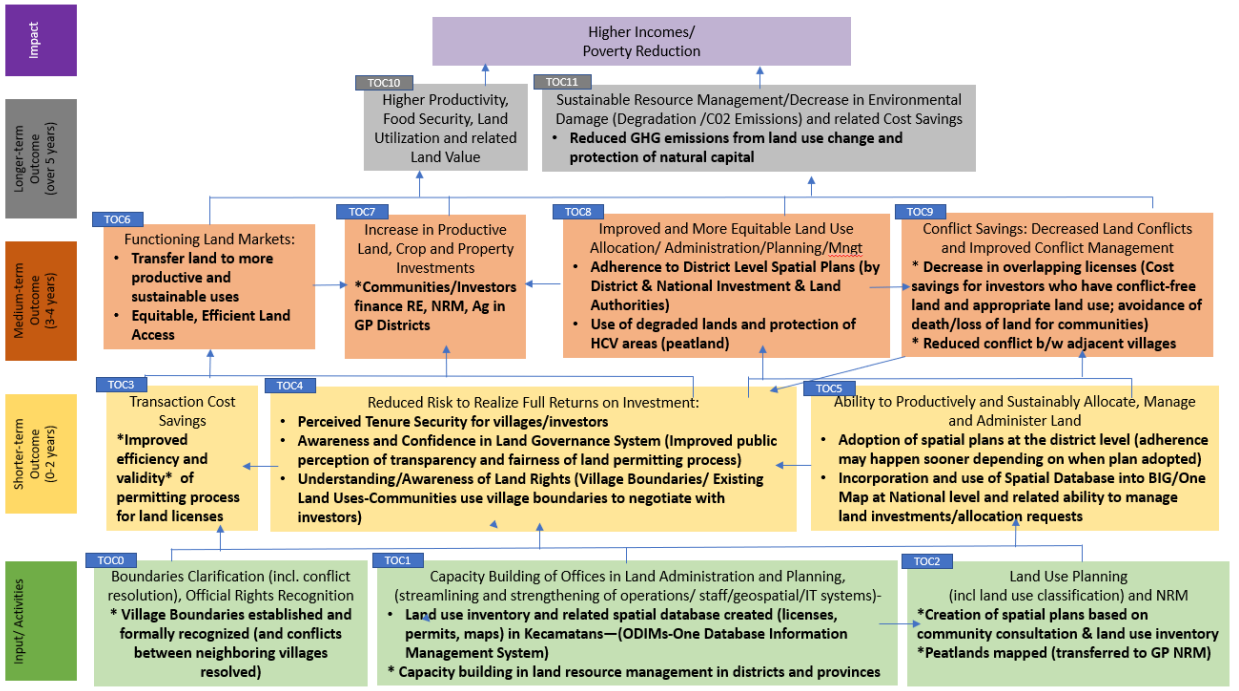
[55] For Task 1 districts only.
[56] *Ibid.*

B. Overview of the Project and Implementation

i. Theory of Change

In the Logical Framework provided to the ET in Stage 1, the logic reads that PLUP preceded grant projects through the facility. In actuality, this did not occur. Hence in 2019, MCC provided the ET a PLUP theory of change (Figure 4) that describes the inputs and short, medium, and long-term outcomes of PLUP independent of other window grants. Note that TOC Outcomes 10, 11, and Impact are greyed out. These are not the focus of Stage 2, as detailed below.

Figure 4: PLUP Theory of Change



The Theory of Change is dependent on the following assumptions, also provided to the ET in 2019:

- Government (land and investment agencies) at the national, provincial, and district levels (including parliament) approve and adhere to the boundaries and the spatial plans. (If not approved, still adhered to.)
- Spatial databases are kept up to date/current with licenses/land allocations/land classification changes
- Continued capacity of government to use and manage spatial database in land allocation decisions
- There are degraded areas and High Conservation Value (HCV) areas in GP districts
- The cost of investment in areas of conflict or HCV areas is high
- Peatland maps need to go to district/provincial/national investment/land allocation decision makers (not just Peatland Restoration Agency-BRG) in order to affect land allocation

The ET will focus Stage 2 on the verification of outputs and seven outcomes (Theory of Change (TOC) 3-9) according to short and medium-term distinctions, based on the extent results are expected to be (or actually) achieved, with an understanding that many short-term outcomes may more fully develop over time. Short-term outcomes refer to results that are achievable within 0-2

years post-implementation completion. Medium-term outcomes refer to results that are achievable (or likely to be achieved) 3-4 years post-implementation completion.

C. Evaluation Design

i. Evaluation Purpose and Questions

Updates to the EQs and sub-EQs, in consideration of the provided ToC and inclusion of the expansion sites, were made in 2019 for Stage 2 and are included in Table 14. At times, the revisions differentiate between expansion and pilot sites to better capture the area of focus for each location. Explanation of changes are included in the final column of the table.

Table 14: PLUP Evaluation Questions

	Evaluation Question	Evaluation Sub-Question	Justification for Change
EQ1	**Original:** How has PLUP progressed in the short-term outcomes, and how is it likely to progress in the achievement of long-term outcomes? **Revised (Expansion and Pilot sites):** To what extent have a) PLUP outputs been sustained and b) short- and medium-term outcomes been realized?	By Outcomes, as listed below.	For all sites (expansion and pilot), the ET will explore existence and sustainability of outputs, and measure short- and medium-term (interim) outcomes. Based on the updated TOC, long-term outcomes are not intended to be realized for several more years, however, intermediate outcomes may be suggestive as to whether or not longer-term objectives could be effectively measured. Though this EQ does not include a question that requires the measurement of long-term outcomes at this stage, the ET has proposed measurement approaches that could be used to explore long-term outcomes in the future, as requested in the Scope of Work (SOW). For explanation of outcomes, see section 2.
EQ2	**Original (retained for Pilot sites):** To what extent did the sustainability of outputs and achievement of outcomes vary by geography or sex and vulnerable/ marginalized groups? **Revised (added for Expansion sites):** To what extent did the sustainability of outputs and achievement of outcomes vary by implementer, contract type (with or without Task 1), geography/land use, or sex and vulnerable/marginalized groups?		The EQ wording has been adjusted slightly for expansion district data collection to better capture expansion district areas of interest. For pilot sites, the wording has been maintained from the early results evaluation as the areas of interest remain the same. Sub-EQs be removed as they will both be answered in the overall EQ.

	Evaluation Question	Evaluation Sub-Question	Justification for Change
EQ3	**Original:** What were the main challenges in managing PLUP? **Revised (Expansion sites):** To what extent did PLUP lessons learned and changing environmental factors impact implementation of expansion site PMAP contracts? What were the main challenges in managing and implementing PLUP? **Revised (Pilot sites):** Not applicable.	a. To what extent did PMAP contractors utilize lessons learned from earlier PMAP contracts? b. To what extent did PMAP contractors, MCA-I, and MCC adapt to changing external/environmental factors during the implementation of PLUP?	Based on discussions with MCC, the ET will explore how, if at all, PMAP contracts post-PMAP 1 were impacted by/learned from PMAP 1 experiences. The EQ and related sub-EQs have been revised accordingly. This question will not be included for pilot sites in interim data collection as the question was answered in Stage 1.
EQ4	**Original (Retained for both Pilot and Expansion sites):** What were unintended results (positive or negative) achieved by PLUP?	N/A	These is no change to this question in Stage 2 vs Stage 1.
EQ5	**Original (REMOVED):** Through what pathways, if any, is increased spatial certainty likely to increase household incomes? What evidence does the evaluation find of this?	N/A	This question has been removed from interim data collection in expansion and pilot sites. This question was included and answered in the pilot site early results evaluation to allow MCC and MCA-I to explore whether or not PLUP was likely to contribute to Green Prosperity goals even though it was implemented after the investment grants were made. In this early results evaluation, it was too early to assess the extent to which household incomes had changed.

ii. Evaluation Design Overview

There are a number of significant adjustments to the EDR that are shown below. We show here how the Stage 2 design responds to the Stage 1 evaluation and highlight the substantial differences in design related to both a revised set of outcomes from the MCC Theory of Change, and the changes in the method that are required for the expansion sites and use of geospatial and other secondary datasets. Many of the core concepts are consistent in the previous and revised Theory of Change, which will enable comparability with the early results evaluation on pilot sites.

Stage 1 of data collection took place during the latter half of implementation of PMAP 1 implementation in the four pilot districts, in August - September 2016 (and was informed by a scoping trip in January 2015).[57] It forms an early results analysis for the pilot districts and comprises a full assessment of the original evaluation questions.

Stage 2 of data collection is informed by the results from the Stage 1 of data collection and a scoping trip conducted in July 2019. Data collection originally planned for 2020 was delayed due to the COVID-19 pandemic and will take place approximately three years after the closure of the Compact (2021) in both pilot districts and the expansion districts, of which there are 40 in total. In pilot districts, following the first stage of data collection, the evaluation team will focus on the full range of evaluation questions. In expansion districts, the evaluation will focus on a meso-level assessment of some of the bigger questions about the continuity of PLUP outcomes after the completion of the project, with less emphasis on outcomes for households or individual community members and more on the efficacy and sustainability of the systems that PLUP implemented. This means that in expansion sites, we will not conduct in depth inquiries at the village level to understand perceptions and experiences of community members but focus more on the influence that the land management systems imparted by PLUP have had on decision making, land use allocation, and larger-scale results.

Similar to Stage 1, Stage 2 of the evaluation will use a mixed-methods approach, with primary qualitative data collection and analysis of available quantitative secondary data. Qualitative data collection will include a thorough review of selected PMAP narrative report monitoring data, as well as key informant interviews[58] (primary qualitative data collection) with project stakeholders across multiple levels of selected PMAPs. Different than Stage 1, Stage 2 will have a more robust quantitative data analysis component, which will include geospatial data, secondary data collected by government actors, and key datasets (discussed in detail below) that could contribute to an analysis of PLUP outcomes. Findings will be triangulated against data accessed through public record and in consultation with provincial and district government offices.

Table 15 describes each Stage of the evaluation by target PMAP site type (pilot or expansion), and focus areas related to outputs and outcomes.

[57] Data collection was planned to take place after the scheduled completion of PMAP 1, but implementation was delayed, and evaluation data was not.

[58] FGDs were originally included in the Stage 2 design but later dropped due to COVID-19 and the risk associated with group gatherings.

Table 15: PLUP Evaluation Stages

	Target PMAP site type	Output Verification	Short-term outcome measurement	Medium-term outcome measurement	Long-term outcome measurement	Level targeted for data collection	Status
Stage 1	Pilot	X	X	X		National, Provincial, District, Sub-District, Village	Completed (data collection in 2016)
Stage 2	Expansion	X	X[59]	X[60]		National, Provincial, District	Designed (data collection scheduled for September/October 2021)
Stage 2	Pilot	X	X	X		National, Provincial, District, Sub-District, Village	Designed (data collection scheduled for September/October 2021)
Stage 3	Expansion and Pilot			X	X	National, Provincial, District	Not yet contracted

iii. Methodology

The proposed pre-post qualitative performance evaluation at Stage 2 will rely on secondary quantitative and spatial data made available through the PLUP implementing partner(s) and government stakeholders, as well as primary qualitative data from key informants and participants at the national, provincial, and district levels as well as a geospatial survey[61] *for both pilot and expansion sites*, and additional remote KIIs[62] at sub-district and village levels *for pilot site data collection*.

[59] Expansion will focus on systems-level short-term outcomes while the pilot site data collection will focus on both community and systems level outcomes.
[60] Expansion will focus on systems-level medium-term outcomes while the pilot site data collection will focus on both community and systems level outcomes.
[61] This survey is a checklist for geospatial data holders. It will be conducted by local assistants and supported by the ET. Target respondents would typically be the operators of the IMS servers and data systems, either at the Planning department, or the Public Works department - depending on the province.
[62] FGDs were originally planned for pilot sites at the sub-district and village level. Due to the risk of group meetings during the COVID-19 pandemic these were dropped. There will be no village-level data collection for expansion sites.

For Stage 2, PLUP short- and medium-term outcomes are related to EQ1. PLUP outputs will also be examined in EQ1 to assess the extent they have been produced (and validated) and to the extent they are used by the intended stakeholders/beneficiaries to achieve the desired outcomes. The ET has constructed a general approach to each relevant outcome at Stage 2 as detailed in Table 16. Following this table, there is explanation of each data collection method to be used for the evaluation, namely: Key informant interviews, checklists, observation, document review, and secondary data review.

TOCs 0 – 2 in Figure 2 are marked as "inputs" or "activities." These outputs, along with short-term outcomes of TOC5, will be verified during Stage 2 data collection through observations and key informant interviews. The ET will develop a protocol that facilitates the verification of the existence of all relevant outputs (resulting from activities / inputs) related to a sampled village/sub-district/district/province/ministry and Task (1 – 4). This will allow the ET to confirm sustainability of outputs in EQ1. This observation protocol will include items like the following:

- Boundary pillars (from village boundary setting)
- Operationality of ODIMs (IMSs) and related servers (or plans by districts to operationalize IMSs and servers that are currently non-operational)
- Incorporation of IMS spatial/land use data in national databases (BIG, etc)
- Existence and Adoption of plans in district and provincial plans
- Use of the plans and IMS systems in investment decision making at various administrative levels.
- Bupati decrees, formalizing village boundaries[63]

For each short- and medium-term outcome (TOC3 – TOC9) listed in Table 16, the ET will use multiple methods for measurement. Both secondary data (geospatial and administrative data) and primary qualitative data are referenced throughout. Data sources, availability, and limitations are coded as GREEN (if data are available to the ET or can be collected without any foreseeable challenges) or YELLOW (if data is understood to exist but may not be available or reliable). Table 16 shows the ET approach to addressing each outcome for EQ1 and datasets that it will use to do so. Unless posted otherwise, the timeframe for the collection of permit information and datasets related to conflict and so on will be from three years prior to the end of PLUP until the most recent data available at the time of data collection. Specific datasets are listed in Table 18 and referenced in Table 16 and Table 17 and noted by [DSX] where "X" refers to the dataset number in Table 18.

The ET will not directly measure TOC10, TOC11, and Impact in Stage 2, but will provide indicated data that signals whether or not such measurements will be possible and by what methods at a later date.

[63] Bupati decrees are what make the village boundaries legal and are a foundation for adoption of village boundaries in district and provincial planning.

Table 16: Approach to Measuring PLUP Outcomes

#	Theory of Change Element	Approach	Proposed Data Sources and Source Availability (denoted by color)
Short-term (0-2 Years After Implementation)			
TOC3	Transaction Cost Savings • Improved efficiency and validity of permitting process for land licenses	To measure the efficiency and validity of the permitting process for land licenses in PLUP locations, the ET will analyze the permitting processes in each jurisdiction and assess the content utilized in each step, to the extent possible given available data (see administrative data in yellow). This evaluation proposes to focus on the extent to which good governance principles are incorporated into permitting processes, including time, safeguards, transparency, dissemination, uses, and oversight. Efficiency will also be measured using key stakeholder (i.e., BAPPEDA, Public Works, and relevant agencies, investors, village leaders) perceptions of how the processes have changed – if at all - as was done at Stage 1 (see qualitative data in green). Through primary qualitative data, a broad range of respondents will be asked about perceptions of changes in the allocation of land rights and conditions for investment. Specific inquiries will be made with policymakers, companies, and investors at national and subnational levels pertaining to attributions between the interventions in PLUP and reductions in risk, ease of doing business, influences on productivity, impact on cost/expenditure, and changes in investment potential in PLUP villages. Based on scoping, the administrative data from district Pelayanan Terpadu Satu Pintus (PTSPs) is expected to vary, possibly significantly, by district both regarding availability and reliability. Regardless, for each district in the sample, the ET will request this administrative data, and if provided, assess reliability. If reliable, it will be used to measure this outcome in addition to the qualitative data collection proposed. The measurement of this outcome, therefore, is expected to differ by district.	• Qualitative data collection with BAPPEDA, Public Works, and relevant agencies pertaining to specific land use permits (e.g. Agriculture, Forestry, Mining, BPN, etc.) to understand the key permitting issues, as well as discuss any challenges with land identification, conflicts that have come up for investors and use/adherence to spatial data and village plans when administering permits. • Qualitative data collection with key stakeholders (community leaders [pilot sites only], companies, policymakers) to assess and provide examples of efficiency of land use permit applications (e.g. ease of identifying land within clear, legal and generally accepted land boundaries where companies/investors can quickly and efficiently develop and invest without conflict, limited need to clear/drain land, or having to go through multiple administrative authorities and community consultations to find/clarify exact investment location), and specifically change over time. • Administrative data on permit processing times (application to permit issuance) from district PTSP [DS1]. • List of administrative permit decrees issued by PTSPs in sample PLUP districts, province and national level as applicable [DS5]. • District and village land use plans [DS3&4]. Village boundaries [DS11].

#	Theory of Change Element	Approach	Proposed Data Sources and Source Availability (denoted by color)
TOC4	Reduced Risk to Realize Full Returns on Investment: a. Perceived Tenure Security for villages/investors b. Awareness and Confidence in Land Governance System (Improved public perception of transparency and fairness of land permitting process) c. Understanding/Awareness of Land Rights (Village Boundaries/ Existing Land Uses-Communities use village boundaries to negotiate with investors)	The ET will explore tenure security, confidence in land governance administration in PLUP locations within partner institutions (e.g. BAPPEDA and other agencies) and understanding/awareness of land rights (village boundaries/ existing land uses) among sub-national decision-makers, investors, village stakeholders and NGOs in PLUP locations to measure this outcome. **Perceived Land Tenure Security**: The evaluation of land tenure security will rely on qualitative data from stakeholders (investors, village leaders, NGOs) on the extent to which land tenure security has changed since the implementation of PLUP and to what extent changes can be attributed to PLUP. Land Tenure Security can also be addressed by understanding conflict on land use boundaries, which is measured in TOC9. **Land governance**: Qualitative data will be collected from national, provincial and district level government stakeholders, village leaders and investors to understand the challenges and governance impacts behind boundary-setting and its effect on risk for investment and fairness of land permitting/allocation based on IMSs and related digitization/clarification of existing land uses/licenses and village boundaries/land use plan. This will provide insight into the effectiveness of the regional spatial planning processes in enhancing participatory land use and decreasing conflict through feedback mechanisms from the community and increased access to spatial information for community groups, including women and vulnerable groups and identify reduced risk to realize full returns on investments—namely community leader and investor views. Awareness of Rights (Pilot sites only): After verifying the extent to which land use / spatial plans have been adopted at the village level, primary qualitative data from village-level respondents will be collected that focuses on perceptions of land rights, the extent to which they are aware of the land use boundaries within the village, as well as their ability and/or likelihood to change land uses and/or invest on land (per TOC 5). Awareness of rights will not be evaluated using secondary data.	• Qualitative data collection with national, district, and community level stakeholders to understand perceptions of change in land tenure security and awareness of land rights. • Qualitative data collection with national, district and village-level stakeholders to understand the challenges with and governance impacts fairness and transparency of land allocation • PLUP contractor final reports, which may signal issues identified at the end of PLUP • Qualitative data collection with key stakeholders that include questions around perceptions of adherence to spatial plans and usage of degraded low carbon value land

#	Theory of Change Element	Approach	Proposed Data Sources and Source Availability (denoted by color)
TOC5	Ability to Productively and Sustainably Allocate, Manage and Administer Land a. Adoption of spatial plans at the district level (adherence may happen sooner depending on when plan adopted) b. Incorporation and use of Spatial Database into BIG/One Map at National level and related ability to manage land investments/allocation requests	Land management capacity will be assessed at multiple scales of governance (national (BIG, BPN, KLHK) and sub-national (provincial, district and village level)). This will be assessed first through a geospatial assessment of permitting compared with regional spatial plans, and qualitative data collection with key stakeholders (i.e. BAPPEDA, Public Works, and relevant agencies, investors, village leaders) that include questions around perceptions of adherence to spatial plans and whether spatial databases (ODIMs) and village/district level land use plans are used in their land allocation decision making. Furthermore, the ET will assess the extent to which District governments have the ability to sustainably allocate and administer land with minimal conflicting land rights and increased use of degraded of low carbon value areas. The ET will assess the extent to which ODIMs are accessible and used, and their role in licensing/permitting processes, including those at the national and provincial level and their related access and use of the ODIM spatial data via BIG/One Map. Further analysis will be conducted on the extent to which permits and usage rights conflict with existing land use rights. Qualitative interviews will be conducted with national, provincial and district level stakeholders to understand the challenges and governance impacts behind boundary-setting processes (e.g. BIG). At a minimum, lists of permits and RTRW are likely to be available, and together with qualitative data, the analysis will be adequate to address this outcome. Geospatial data will enhance the sophistication of the response and provide a stronger empirical basis for the qualitative analysis. Finally, the ET will answer the extent to which the PLUP Spatial Database has been incorporated into BIG/One Map at a National level and if it has influenced the national and sub-national governments" ability to manage land investment and use requests. This will be accomplished through first qualitative interviews with key informants at district, provincial and national levels, followed up by an observation of the implementation of the ODIM if at all. The data from districts and provinces directly updated to BIG servers (spatial databases) will be assessed. The ET will attempt to find the individual (if any) that uploads data to BIG, and vice versa to find BIG that provides data to the regions.	• Qualitative data collection at district, province and national level on implementation of core spatial planning functions and capacity to use the system including the extent to which database management systems are functioning, accessible and their role in licensing/permitting processes • Conflict data from TOC9 • Qualitative data collection at district, province and national levels pertaining to the adoption of the MCC Geospatial Database into government planning datasets. Followed by observation of ways in which MCC geospatial data have been adopted. • Geospatial ODIM data [DS8,14, 18 & 19] and permit data on land use permits issued after PLUP from sample PLUP districts from the National Land Agency (BPN) [DS7] and relevant provincial or district agencies [DS5&6]. Village boundaries [DS11]. • Village and district-level spatial plans/ RTRWs [DS3] in sampled districts. Permits [DS5] will be assessed by the extent to which they adhere to plans. Village boundaries [DS11]. • Village and district-level spatial plans/ RTRWs [DS3] in sampled districts. Permits [DS5] will be assessed by the extent to which they adhere to plans. Village boundaries [DS11].

#	Theory of Change Element	Approach	Proposed Data Sources and Source Availability (denoted by color)
Medium-term (3-4 Years After Implementation)			
TOC6	Functioning Land Markets: a. Transfer land to more productive and sustainable uses b. Equitable, Efficient Land Access	The ET will collect responses at the village/sub-district or district level on transfers of land to more productive or sustainable uses. The design will draw out key questions concerning land use, current land pressures, existing disputes and resolution mechanisms to land boundaries, and how villagers believe their access to land and its spatial certainty has changed over time. As datasets are available, the evaluation will examine allocation of land/land use of degraded/HCV land in all pilot and expansion areas. The ET will not attempt to measure equitable land access as such a measurement would require an in-depth study that is outside of the resources available to the ET. Land use change will be analyzed from spatial planning and permitting documents to indicate the issuance of permits on peatlands and High Conservation Value Lands, the decrease of which would indicate a movement to less unsustainable land use.	• Qualitative data collection at village/sub-district or district level on transfers of land to more productive or sustainable uses than before PLUP. • Qualitative data collection with village and company stakeholders on changes in the efficiency of access to land pre and post PLUP. • Geospatial IMS data [DS8,14, 18 & 19] and/ or permit data on land use permits issued after PLUP from sample PLUP districts from the National Land Agency (BPN) [DS7] and relevant provincial or district agencies [DS5&6]. Village boundaries [DS11]. • Qualitative data collection on improved perception of conditions for, and rationale of practices of, productive land, crop, and property investments among stakeholders in PLUP locations.
TOC7	Increase in Productive Land, Crop and Property Investments 1) Communities/Investors finance RE, NRM, Ag in GP Districts	The ET will use geospatial/admin data and primary qualitative data to measure this outcome. Measuring investments quantitatively requires datasets that, to the ET's knowledge, do not exist or are of marginal reliability (scoping interviews revealed that investment data is incomplete). Reliable investment data across sectors is not available in	• Qualitative data collection with policymakers, companies, and investors at national and subnational levels pertaining to attributions between the efforts in PLUP and reductions in risk

#	Theory of Change Element	Approach	Proposed Data Sources and Source Availability (denoted by color)
		Indonesia in general. In order to overcome this limitation, the ET proposes to use permit geospatial data as a proxy for investment, assuming that increased areas covered by land use permits will correlate to increased investment. Rather than attributing monetary value to permitted areas, which requires a level of analysis for which the ET is not resourced, the ET will use the area covered in permits aggregated into sectors (i.e. Agro industry, Tourism, Mining). Land-based investment data (e.g.- amount of money invested) at sub-national levels will be difficult to obtain, may not be comparable across districts, and could be unreliable. Permits data will be used as a proxy for investment. Permit data are held in Indonesia from the pre-reformation era, and back to the Dutch colonial era for which place holders could continue to be extended. Permits often overlap, which can indicate multiple uses such as mining for multiple minerals for example. While recent permit data may have investment claims attached to them, for a variety of reasons related to taxation (undervaluing) or making a more convincing application (overestimating), these data are not as reliable as the geospatial data, which will inform the evaluation of changes in the total spatial areas of investment by use type. The result will indicate the extent to which investment has changed. (Note: in pilot districts, the perspectives of villagers will also be included in the evaluation). The ET will measure perceptions of conditions for, and rationale behind practices of, productive land, crop, and property investments among stakeholders (i.e. BAPPEDA, Public Works, and relevant agencies, investors, village leaders) in PLUP locations through primary qualitative data. A broad range of respondents will be asked about perceptions of changes in the conditions for investment. Specific inquiries will be made with policymakers, companies, industry associations, and (for Pilot sites only) communities.	• Geospatial ODIM data [DS8,14, 18 & 19] and/ or permit data on land use permits issued after PLUP from sample PLUP districts from the National Land Agency (BPN) [DS7] and relevant provincial or district agencies [DS5&6]. • (Note that land cover changes can be measured using LANDSAT images, however the analysis time required to assess these changes would be more than the resources allocated for the evaluation). Village boundaries [DS11]. • Qualitative data collection at national and subnational levels with government, communities on perceptions of equitable distribution of land use allocation, and implementation of policies relating adherence to spatial plans and use of degraded and HCV land, including Peatland, with specific reference to PLUP activity attribution. Process mapping for land use administration, with specific reference to change pre a post PLUP.

#	Theory of Change Element	Approach	Proposed Data Sources and Source Availability (denoted by color)
TOC8	Improved and More Equitable Land Use Allocation/ Administration/Planning/Mgmt a. Adherence to District Level Spatial Plans (by District & National Investment & Land Authorities) b. Use of degraded lands and protection of HCV areas (peatland)	Improvement in planning will be evaluated in two ways. The first will map out planning processes and assess the extent to which processes are followed. Change over time will be explored through interviews on outcomes and outputs, such as the establishment of boundaries and experience of dispute resolution, consideration of degraded lands, and others. Furthermore, improvement can also be evaluated at a broader scale in terms of the adherence to the spatial plans and existing regulations. Improved land use can look at the broader landscape, its natural resource functions, and vulnerabilities for future planning. Adherence to spatial plans will be assessed through (a) a geospatial assessment of permitting compared with regional spatial plans and existing ODIM licenses/permits and (b) qualitative interviews with key stakeholders (i.e. BAPPEDA, Public Works, and relevant agencies, investors, village leaders) that include questions around perceptions of adherence to spatial plans. Further, an analysis of pre and post PLUP overlapping incompatible permits will be conducted to see if there is change. This will use RTRWs, MCC PLUP data, and primary qualitative interviews. Although geospatial data exists in the MCC database, post-PLUP data that signal change due to PLUP would need to be used for the evaluation. If it is not available, and if the RTRW is not available, qualitative interviews will be the primary data source.	• Geospatial ODIM data of HCV and peatland areas [DS9,15, 12&16, 20] and land use permits issued since PLUP in PLUP and non-PLUP communities in PLUP and neighboring non-PLUP from BPN. Village boundaries [DS11]. • District-level spatial plans/ RTRWs approved in sampled districts [DS3&4]. • Qualitative data collection with village leaders to understand the nature of the disputes, drivers and levels of ongoing conflict and change pre-post PLUP.
TOC9	Conflict Savings: Decreased Land Conflicts and Improved Conflict Management a. Decrease in overlapping licenses (Cost	To explore incidences of conflict, the ET will ask community leaders about number/extent of conflict pre and post PLUP, exploring drivers of the change and types of conflicts that ongoing. These data will be explored qualitatively, since increased reported conflicts could indicate	• Qualitative data collection with village and district leaders on conflict resolution process mapping. (Pilot sites only) • PLUP contractor final reports on each village

#	Theory of Change Element	Approach	Proposed Data Sources and Source Availability (denoted by color)
	savings for investors who have conflict-free land and appropriate land use; avoidance of death/loss of land for communities) b. Reduced conflict b/w adjacent villages	increased awareness of defined boundaries rather than poor conflict management. Perceptions on land tenure security are covered in TOC 3. Secondary geospatial data will be used to assess the extent to which land use permit areas in PLUP districts display overlaps compared with non-PLUP districts. Overlap in land use permits will be assessed by reviewing permits/licenses against ODIMs/district spatial database of existing land licenses for incompatible land uses. Several government agencies have begun collecting conflict data in the past seven years. While the number of conflicts and the number of conflicts resolved do not serve as a reliable indicator for improving tenure security, using specific cases in these databases to consider how tenure security has changed will provide insight into land tenure security concerns and changes that have taken place. These also need to be cross-referenced through discussions with non-government actors. For Pilot sites only: To explore conflict, the ET will focus on asking district and village-level respondents about the conflicts on land use. If reliable conflict data is available from PLUP districts (as triangulated with government and non-government respondents), the ET will compare number of conflicts in PLUP and non-PLUP communities, as an indicator of the change in reported conflicts.	• Ministry of Agrarian Reform conflict database and geospatial data • Ministry of Environmental and Forestry conflict database and geospatial data (both forest and non-forest) [DS10a,b,c]. • Village-level conflict records (based on scoping, basic data will be available to identify conflicts to explore qualitatively, though in some cases further data may be available for quantitative analysis) [DS17]. • Geospatial ODIM data / permit data on land use permits issued after PLUP from sample PLUP districts from the National Land Agency (BPN) [DS5,6,13,14]

iv. Addressing indications of long-term outcomes in the interim evaluation reports

Long-term and impact level outcomes for PLUP relate to productivity, food security, land utilization and value, sustainable resource management, GHG emissions from land use change and protection of natural capital, and poverty (see Table 17 below). According to the Theory of Change, these outcomes may be realized after five years of PLUP contract completion through improved markets, increased investments, improved land administration, and reduced land conflicts.

The ET has already signaled that the availability and reliability of secondary data related to short- and medium-term outcomes is a challenge to answering evaluation question 1 at Stage 2. The success of obtaining data relating to investment, conflict, and efficiency of land use administration (to measure TOC 10, 11, and Impact outcomes) in Stage 3 will also likely be challenging for the same reasons.

The Stage 2 reports (for pilot and expansion sites) will make recommendations on how to use secondary data utilized in Stage 2 to explore long-term outcomes. Additionally, the ET has provided in the table below proposed approaches to each outcome and proposed data sources for each outcome. The ET points out, however, that secondary data alone will be insufficient to address the extent to which changes in long-term outcomes can be attributed to PLUP as there are a myriad of other variables that could contribute to the PLUP outcomes and impact.

Table 17: Long-term Outcomes

Long-term (5+ Years After Implementation)			
#	**Theory of Change Element**	**Approach**	**Proposed Data Sources**
TOC10	Higher Productivity, Food Security, Land Utilization and related Land Value	The ET will be able to ask key informants at policymaker, local government, civil society, and community levels about their perceptions of any linkages between increases spatial certainty and productivity, land utilization and land value. Findings would be suggestive rather than definitive. Productivity and land utilization could be tracked using geospatial datasets to understand change over time in land uses.	• Qualitative interviews with policymakers, local governments, civil society, and community members. • Geospatial ODIM data [DS8,14, 18 & 19] and/ or permit data on land use permits issued after PLUP from sample PLUP districts from the National Land Agency (BPN) [DS7] and relevant provincial or district agencies [DS5&6]. Village boundaries [DS11]. Additionally, satellite imagery could be used to compare change over time of both PLUP and non-PLUP districts for land utilization.
TOC11	Sustainable Resource Management/Decrease in Environmental Damage (Degradation /C02 Emissions) and related Cost Savings a. Reduced GHG emissions from land use change and protection of natural capital	The ET will be able to ask key informants at policymaker, local government, civil society, and community levels about their perceptions of any linkages between increases spatial certainty and land degradation or carbon emissions. Findings would be suggestive rather than definitive. Geospatial analysis of land uses could be used, and specifically land use overlapping with HCV lands. GHG calculations from	• Qualitative interviews with policymakers, local governments, civil society, and community members. • Geospatial ODIM data of HCV and peatland areas [DS9,15, 12&16, 20] and land use permits issued since PLUP in PLUP and non-PLUP communities in PLUP and neighboring non-PLUP from BPN. Village

		these land uses would require carbon emissions calculations based on land use type.	boundaries [DS11] + LANDSAT images.
IMPACT	Higher incomes/ poverty reduced	The ET will be able to ask key informants at policymaker, local government, civil society, and community levels about their perceptions of any linkages between increases spatial certainty and poverty. Findings would be suggestive rather than definitive. At baseline, the ET explored the *likelihood* of PLUP impacting change in incomes/levels of investment. This question was answered, and the ET found the link between PLUP and these higher-level outcomes (higher incomes and investment) was tenuous and would only be realized (if at all) in the long-term (5+ years post implementation). In the long-term evaluation, evaluators could consider that if tenure security increased and resulted in productive investments at village level, there could be a link with higher incomes and productivity. Poverty indices from BPS (Statistical Bureau) could be used to understand poverty changes, but attribution would be problematic.	• Qualitative interviews with policymakers, local governments, civil society, and community members. • Household poverty assessments from the BPS (Statistical Bureau)

v. Data Collection

The EQs and outcomes presented above will be answered/measured via several methods. Each method is discussed below. In summary, similar documents and secondary data will be used for both expansion and pilot site data collection as relate to the outcomes relevant for each data collection activity. The core difference between the approaches is in the KII respondent categories. The pilot site data collection, as described in the main body of this EDR, will include a focus on the village level to the national level (including interviews with village-level stakeholders from VPTs, etc.). The expansion site data collection will not focus on the village level but will include all other respondent types. The information presented below includes notes about differences between pilot and expansion site data collection where necessary.

vi. Document Review and Secondary Data

Document review and collection of secondary data for both expansion and pilot sites will include the types of documents listed below. The team will first review PLUP monitoring data. Monitoring data on inputs and outputs, disaggregated by province and ideally district, will be used to review achievement to planned targets and timelines. Indicators to be reviewed include: number of village boundaries established; number of district land use, land cover, and permits and licenses inventories publicly available; land area of villages delineated via village boundary setting (VBS); number of villages assisted in participatory boundary setting; and number of enhanced district-level spatial plans. This type of data provides the ET with critical insight into relative successes or pitfalls of PLUP implementation that may be investigated further through key informant interviews and focus group discussions with project stakeholders.

The ET has not designed the evaluation to be dependent on centralized geospatial reporting data. The scoping mission showed that the BIG server, for example, had been offline since PLUP ended. The ET will verify this at the beginning of Stage 2 fieldwork. The ET has also requested to BAPPENAS, for example, a list of districts that are still maintaining servers set up in PLUP. While those data were not forthcoming in order to include in the site selection for this evaluation, the availability of such a list would enable the ET to provide data beyond the sites sampled in this design report. Similarly, data such as lists of all spatial planning documents or permits may not be accessible at national and provincial levels. None of the district, provincial, or national respondents in scoping could commit that data could be made available to the ET, except for BAPPENAS, which suggested commitment to ensuring that data are available. The ET will attempt to acquire national or provincial-level data so that a broader analysis can be made but is prepared to answer evaluation questions using the data available at the district level for sampled districts should national collections of suitable data not be available. The ET therefore takes a cautious approach to depending on these data to complete the evaluation by suggesting what data sources could be used in the event that secondary data are not made available.

Following collection and review of M&E data, the ET will request datasets from the relevant offices and ministries on permit and license applications, changes in designation of agriculture versus forest land, forest concessions, conservation land, and documentation of land-related disputes (to the extent possible). Table 18 details datasets and dataset holders that are referenced in the approach to evaluating each outcome with the current status of collection. These data provide a view of the extent to which PLUP's intended outcomes (short- and medium-term), such as reduced land-related disputes and increased transparency and access to land permits, are being achieved. This also provides data to assess the extent of overlapping licenses, use of degraded lands, and conformance with spatial plans, as below. Verifiable records also allow the ET to assess the degree to which PLUP processes and outcomes are publicly demonstrable.

The ET will conduct geospatial change analysis as follows:

1. Change in degraded/critical lands: There are national datasets available on critical lands, which are also updated every year. Some of these were compiled by the PMAP contracts. The ET will conduct change analysis on the thematic category of critical lands that point to the locations of such changes.
2. Change in spatial planning categories: The ET will examine how change took place between two points of spatial plans. This will include an analysis of how land use planning categories have changed from one spatial plan to the next. The way a spatial plan changes during the period of PMAP implementation will highlight the ways that PMAP influence some key decision-making process.
3. Land use change: There are many ways to consider land use change analysis relative to PLUP. Change analysis will highlight the way land intensive development trajectories changed over a particular period of time. Carbon values from existing databases could also be assigned and attribute these to change, although the analysis would be necessarily coarse.
4. Land permitting area change: The ET will examine the area and types of permit data from one time period to another. Permitting decisions are highly political, and the analysis would be contingent upon the availability of the data, but combined with qualitative findings, would be insightful.

The ET will analyze changes to updated spatial plans (if available) with regard to land use to understand if these changes reflect any investment associated with the results of PLUP. The results can then be compared to PLUP's intended objectives and triangulated with public record and

qualitative data in order to elucidate factors contributing to changes in land use, investment, and disputes. By the end of PLUP implementation, this type of analysis will also provide indication to the extent provinces, districts, and local communities comply with updated spatial plans for land use.

Table 18: Databases to be requested by ET in Stage 2

No	Name of Data Set	Agency	Contact person / office	Status
1	Standard Operating Procedures (SOPs) on land permitting	Provincial / District PTSP (or BKPM)	Head of Agency	Not yet collected/received
2	Standard Operating Procedures (SOPs) online agency responsible for verifying land permits	Forestry, Agriculture, Mining, Land Agency, Fisheries (Provincial and district – can sample from most common land use permit type, where relevant)	Head of Agency	Not yet collected/received
3	Spatial Plan (Provincial and District)	BAPPEDA / Public Works	Head of Agency	Not yet collected/received
4	Spatial Plan – minutes of meeting on public consultations (gleaning for specific information on land challenges), including information on number of people in attendance, background of attendees, and issues raised.	Regional Spatial Planning and Coordinating Board (BKPRD) / BAPPEDA / Public Works	BKPRD Coordinator	Not yet collected/received
5	List of administrative permit decrees issued	PTSP	Head of Agency	Not yet collected/received
6	Spatial coordinates of land use permits with data of approval	PTSP / BAPPEDA / Public Works	Head of Agency	Not yet collected/received
7	Repository of spatial data	BAPPEDA or Public Works, depending on the progress of data migration process	Head of Agency	Not yet collected/received
8	Spatial database for upload to geoportal and SOP for selection process	BAPPEDA or Diskominfo	Geoportal manager	Not yet collected/received
9	BKPRD land update – produced as part of the spatial planning process that describes land and development concerns	BKPRD / BAPPEDA / Public Works	Head of division on Spatial Planning	Not yet collected/received
10	Conflict data from (a) BPN (Kanwil or national), (b) MOEF, (c) Ministry of Home Affairs (MOHA), including information on the number, area, coordinates, intervention, and resolution	BPN/ATR, MOEF, MOHA	MOEF: Directorate for Conflict Resolution, Tenure, and Customary Forests BPN: Directorate General Agrarian Challenges and Land Uses BPN: Kanwil office MOHA:	Not yet collected/received

No	Name of Data Set	Agency	Contact person / office	Status
11	Village boundary data	MOHA, BIG, Governance division at Provincial and District governments	MOHA Directorate general of village governments BIG Deputy for Regional Boundaries Mr Ade Komara Mulyana DPMD/BMPD (Village empowerment agencies at the district level)	MCC data received; updates not yet collected/received
12	2010-2015 Degradable /critical land of project area / selected sites.	MOEF	Directorate of watershed and forest management & Directorate of forest planology and environmental planning	Not yet collected/received
13	PMAP Data	BIG Kepala Pusat Penelitian, Promosi dan Kerja Sama	MCA-I Project manager for BIG Mr Wiwin	Received
14	ODIM Geoportal Data and Geospatial User Data (registration numbers)	BIG BAPPEDA and Information and Communications Agency (Diskominfo) Pusat Pengelolaan dan Penyebarluasan Informasi Geospasial	Head of Standardization and Geospatial Information Management Institutions Mr Suprajaka Head of Center on Geospatial information management and dissemination BAPPEDA Subdivision of Data and Information Systems	Not yet collected/received
15	Peatlands database	BRG	Head of Agency	Not yet collected/received
16	High Conservation Value database	MOEF	To Be Determined (TBD)	Not yet collected/received
17	Village level conflict records	Sampled Villages	Head of Village	Not yet collected/received
18	2010-2015 Landuse/Landcover of project area / selected sites	MOEF /BIG/ Center of Remote Sensing Utilization (LAPAN)	Directorate of watershed and forest management & Directorate of forest planology and environmental planning LAPAN	Not yet collected/received

No	Name of Data Set	Agency	Contact person / office	Status
19	2019/2020 Landuse/Landcover of project area / selected sites	MOEF /BIG/LAPAN	Directorate of watershed and forest management & Directorate of forest planology and environmental planning / LAPAN	Not yet collected/received
20	2019/2020 Degradable /critical of project area / selected sites	MOEF	Directorate of watershed and forest management & Directorate of forest planology and environmental planning	Not yet collected/received

vii. Qualitative Data

For expansion sites, the ET proposes collecting qualitative data in Jakarta and three provinces, conducting 55 data collection activities (KIIs or surveys) across the three provinces (a breakdown is provided in Table 21). Additionally, observations will be conducted in district offices that were targeted to receive hardware or IMS support and materials. All KIIs and surveys will be conducted according to pre-developed and tested interview protocols (see Table 17).

For pilot sites, refer to the main EDR above as well as Annex 2 for proposed methods and intended respondents. The primary difference between data collection for expansion sites and pilot sites is the latter's inclusion of village/community respondents.

Revisions highlighted in this Annex reflect precautions to ensure the safety of the evaluation team and respondents in response to the COVID-19 pandemic. As such, travel has been minimized and group meetings (including focus group discussions) have been replaced by individual interviews both remotely, and where remote meetings are not possible, in-person by interviewers already based in the province in which contact will be made between interviewer and respondent. The changes in approach come with some limitations in terms of data collection. First, building rapport with respondents in a remote interview setting, and noticing non-verbal cues and responses, tends to be more challenging. The ET will mitigate these challenges by using video calling when feasible and conducting interviews entirely in Bahasa Indonesian without requiring the use of a translator, which might otherwise slow or alter the natural discourse of the discussion. Furthermore, as the topics covered are not viewed as sensitive, the disadvantages to remote administration in this evaluation are less than they might be in other contexts where rapport and trust are essential for honest discussion.

A second disadvantage is that observation is limited in remote delivery, meaning that contextualizing discussions in the surroundings of interactions (e.g., office settings, community environment) cannot be done effectively, which may present minor lost opportunities for discussion and nuance. However, the core ET conducting the interviews are all residents or citizens of Indonesia, providing a greater contextual understanding even without in-person administration. In addition, each location will be staffed with a local coordinator that can serve as a resource and in-person facilitator if needed and assuming COVID mitigation protocols can be met. Third, respondents might more readily agree to in-person meetings if the SI team were in their location, whereas remote meetings might be more prone to postponement or delay by respondents. On the

other hand, many respondents have adjusted to remote work over the course of the pandemic and rescheduling is simpler for remote interviews. Finally, the original design called for ET inspection of the IMS together with data users. This is not possible remotely since screensharing or remote access to databases is unfeasible. This limitation is offset by a short survey that will be delivered by a local consultant in-person, depending on the specifics of each location. The instrument guides the consultant and the respondent on what to look for and respond to each point, acting like a checklist to detail the condition of the IMS (detailed later in this document).

The SI team developed semi-structured interview guides (revising and updating baseline protocols from pilot site Stage 1 data collection) to direct each qualitative data collection activity, and notes from qualitative interviews will be created during field work with daily review to ensure clarity. Instruments will branch depending on the presence or absence of operational Task 3-4 results as appropriate (i.e. are the ODIMs being used). The team will record interviews if permitted by the respondents. Interview notes will be coded for analysis using qualitative data analysis software (Dedoose) to construct response categories and identify patterns in data, as relevant. Coding qualitative data through use of software, if deemed useful for certain questions or data, will allow the evaluation team to analyze interview notes with speed and efficiency, easily cataloguing and documenting emergent themes from among respondents. Final analysis will occur at the conclusion of field work.

Table 19 shows a modified, and simplified list of questionnaires to be used in expansion sites. [Table 26: Expansion and Pilot Site Qualitative Data Collection Instruments in Annex 2 has been updated to include Pilot Sites for Stage 2]

Table 19: Expansion Site Qualitative Data Collection Instruments[64]

Expansion Site Questionnaires		
No.	**Type**	**Name**
1	KII	District and sub-district level officials (line agencies, One-stop Shops-OSS)
2	KII	Provincial level officials
3	KII	National level officials (ministries)
4	KII	ex-PMAP implementing partners (Abt Associates, LEI, Niras)
5	KII	NGOs/CSOs/research institutions working in land-use planning and renewable energy projects
6	KII	Concessionaires/Land Claimants/Businesses
7	SURVEY	Geospatial Data Holders and Managers Questionnaire[65]

viii. Sampling

Sampling for the pilot districts will remain unchanged from the EDR approved for the four pilot districts in Stage 1. For the 40 expansion districts, 100 percent coverage of the districts is not feasible

[64] Questionnaires will be developed after approval of the Evaluation Design Report, and prior to the team's arrival in Jakarta, Indonesia in 2020.

[65] The original approach included minimal village-level interviewing in expansion sites. Due to the risk posed by COVID-19, the focus on learning for expansion sites at the systems level, and that villages will be represented in pilot districts, village level interviewing has been removed from expansion sites.

within the budget for this evaluation[66] and therefore sampling is required at least for qualitative data collection. Sampling for quantitative datasets may also mirror qualitative sample districts if the datasets are not available at the national level and have to be collected at district levels. The BAPPENAS MCA-I secretariat suggested that the evaluation cover each island region, while also considering dominant land use types (e.g. plantations, logging, mining, tourism). The sampling approach for expansion districts followed this guidance, while also seeking to cover all PMAP contractors and work within the allotted budget. The result is that not all islands included in PLUP will be sampled, but that diversity of land use and contractors will be explored in Stage 2.

The approach to sample frame development for each respondent type remains the same as at the early results evaluation. Government stakeholders will be purposefully selected based on responsibilities relevant to PLUP. Investors will be selected by snowball sampling from relevant government agencies and/or business associations, or from a list of businesses that have obtained permits since the end of PLUP implementation if made available through district government agencies.

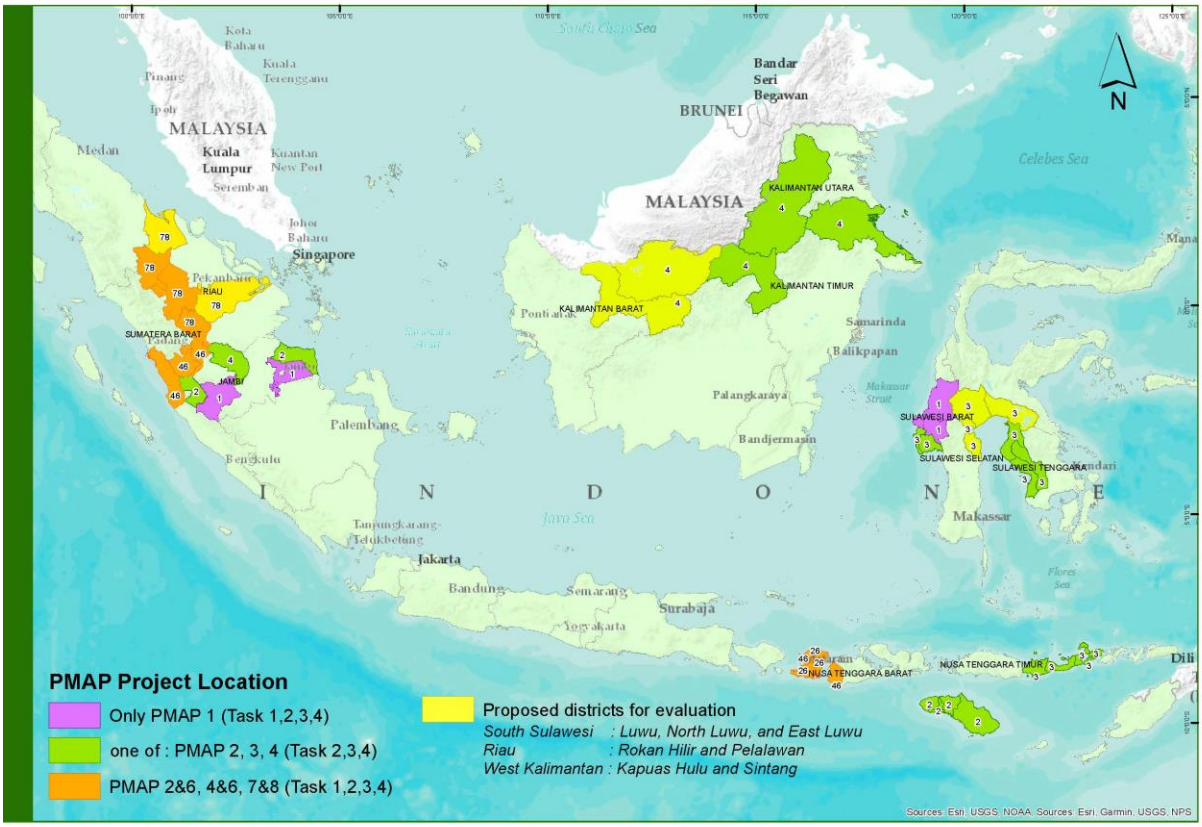
As part of our document analysis, the ET began by identifying all the sites of the PMAP contracts at the district level (see Figure 6 and Table 11). The following factors were collectively identified as the basis for site selection[67]:

- District with Task 2 - 4 only (23 districts)
- District with Tasks 1 - 4 (at the same time, by different implementers) (5 districts)
- District with Tasks 1 - 4 (sequential, by different implementers) (8 districts) *NOTE: No district received Task 1 only.
- Regional considerations (comparisons/similarities), Complex vs non-complex land use areas (an approach to regional comparison) – *this was specifically requested as the basis for site selection by BAPPENAS*
- Timing of spatial planning process (districts with revised spatial plan and one with different review timeline)
- Provinces that had multiple PMAP contracts/contractors with potentially differing ODIMs (West Sulawesi and Jambi).

[66] Phone questionnaires has been proposed as a potential alternative for non-sampled districts. However, given that this format is unusual with government officials in the Indonesian context, the ET anticipates low response rates. The ET believes the most feasible means to answer the question on use/access nationally is to work with Bappenas on data received at the national level. However, if this methodology is not productive the ET will revisit with MCC the feasibility and cost effectiveness of a short, close-ended district level phone survey.

[67] All maps were derived from the MCC geospatial dataset

Figure 5: Spatial distribution of PMAPs by contract



An online survey of all PLUP district data holders was conducted in mid-2020. The survey revealed the status of the IMS servers and PLUP data utilization in each district. Although the analysis of these data will be produced in the evaluation report, a preliminary analysis was used to guide the sampling of districts After applying the selection criteria, considering the resources available to the ET, and attempting to represent a broad geographical representation, the ET has selected the districts shown in Table 20.

Table 20: Sampled expansion sites: provinces and districts, with contractor, contract #, and rationale

Location / region	Contractor	PMAP #	Rationale
Luwu and North Luwu, South Sulawesi	LEI	3 (Task 2-4)	Both districts reported active use of the geoportal and PLUP Data in 2020. Land use includes forest conversion, mining.
Rokan Hilir and Pelalawan, Riau (Sumatra)	LEI and Niras	7 (Tasks 2-4) and 8 (Task 1)	Rokan Hilir reported used of PLUP data (Pelalawan did not respond to the online survey)[68]. Land use includes peatlands,

[68] Though representatives from Pelalawan and Sintang did not respond to the online survey, the ET selected these districts for inclusion because the ET is aware that their IMS servers are online, these districts help improve the geographic representation of the overall sample, and the districts were not considered as high-risk areas for COVID-19 at the time of sampling. Also, the ET does not assume that non-response to the survey indicates that these districts will be non-responsive to interview and data requests.

			plantations.
Kapuas Hulu and Sintang, West Kalimantan	Niras	4 (Tasks 2-4)	Kapuas Hulu reported use of PLUP data (Sintang did not respond to the online survey). Land use includes peatlands and forest conversion, mining, and plantations.

At the time of drafting this document, the selected provinces were not identified as high-risk areas for COVID-19 (see https://covid19.go.id/peta-sebaran). Should that change, the ET will select alternative districts or switch to a completely remote format as outlined in the COVID-19 Risk Mitigation Matrix. [Annex 2 provides information on pilot sites, which uses the same sampling as in the original document, see Table 27]

Table 21: Number of planned observations by instrument type and region

Instrument #	Stakeholder Category	Location				TOTAL
		Jakarta and Bogor	Luwu and North Luwu, South Sulawesi	Rokan Hilir and Pelalawan, Riau (Sumatra)	Kapuas Hulu and Sintang, West Kalimantan	
1	District and sub-district level officials	0	4	4	4	12
2	Provincial level officials	0	1	1	1	3
3	National level officials	4	0	0	0	4
4	Ex-PMAP implementing partners	4	2	2	2	10
5	NGOs/CSOs/research institutions	3	1	1	1	6
6	Concessionaires/Land Claimants/Businesses	2	4	4	4	14
7	Geospatial Data Holders and Managers Questionnaire	0	2	2	2	6
	TOTAL	13	14	14	14	55 Data Collection Activities (KIIs and/or surveys); 6 surveys and 49 KIIs

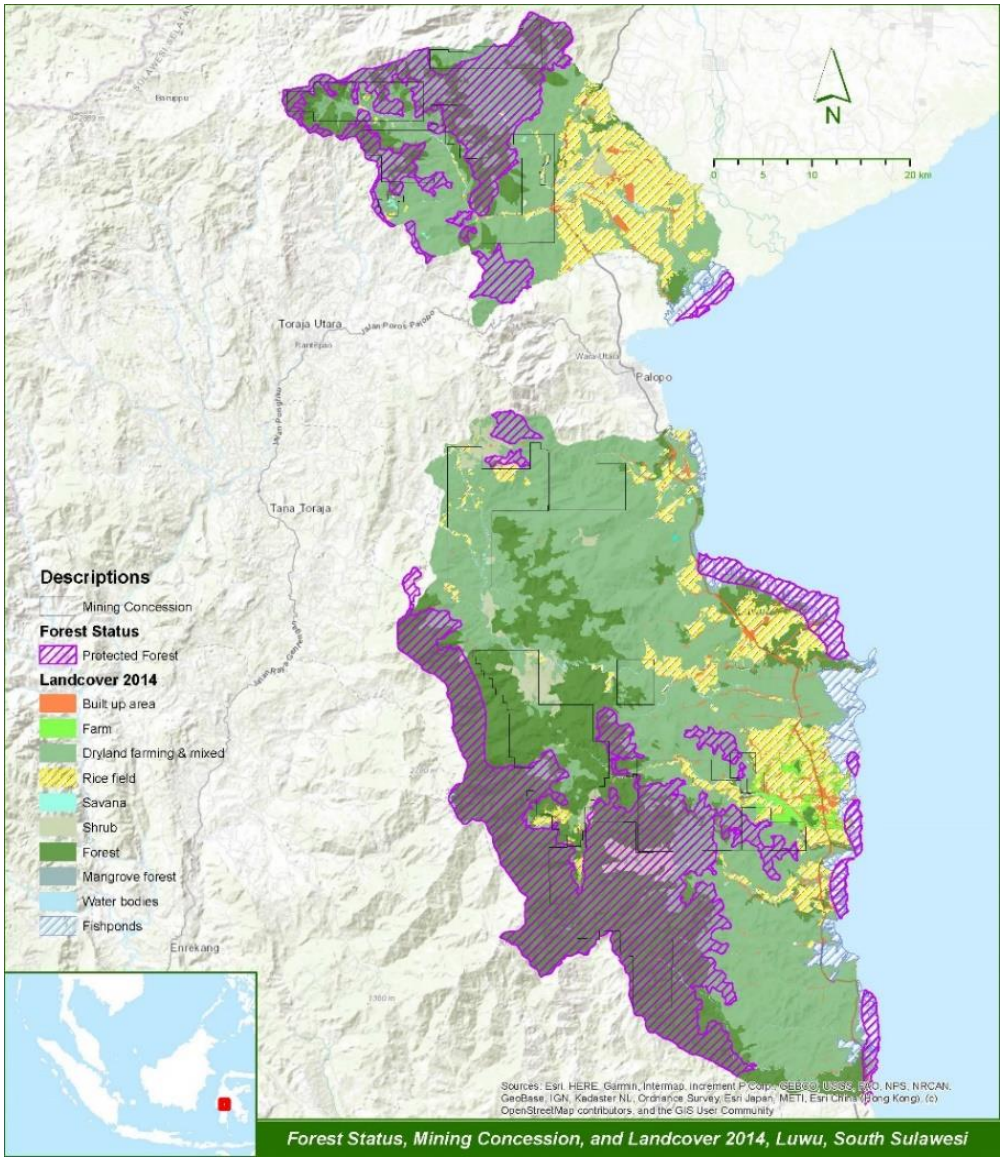
In the sections to follow, each sub-district is analyzed using geospatial data to show rationale for selection of the districts and subdistricts.

Luwu, South Sulawesi

The Luwu District is dominated by agriculture such dryland farming, mixed farming, and rice fields, which covers around 59 percent of its total area. Furthermore, Luwu district has designated around 29 percent of its area into protected forest, but landcover in 2014 shows that 36 percent of this protected forest was already converted into agriculture, fishponds, and settlement areas.

The map below shows an overlay between landcover, forest status and mining concession areas, particularly in the norther and southern areas of the district.

Figure 6: Map of Luwu, South Sulawesi

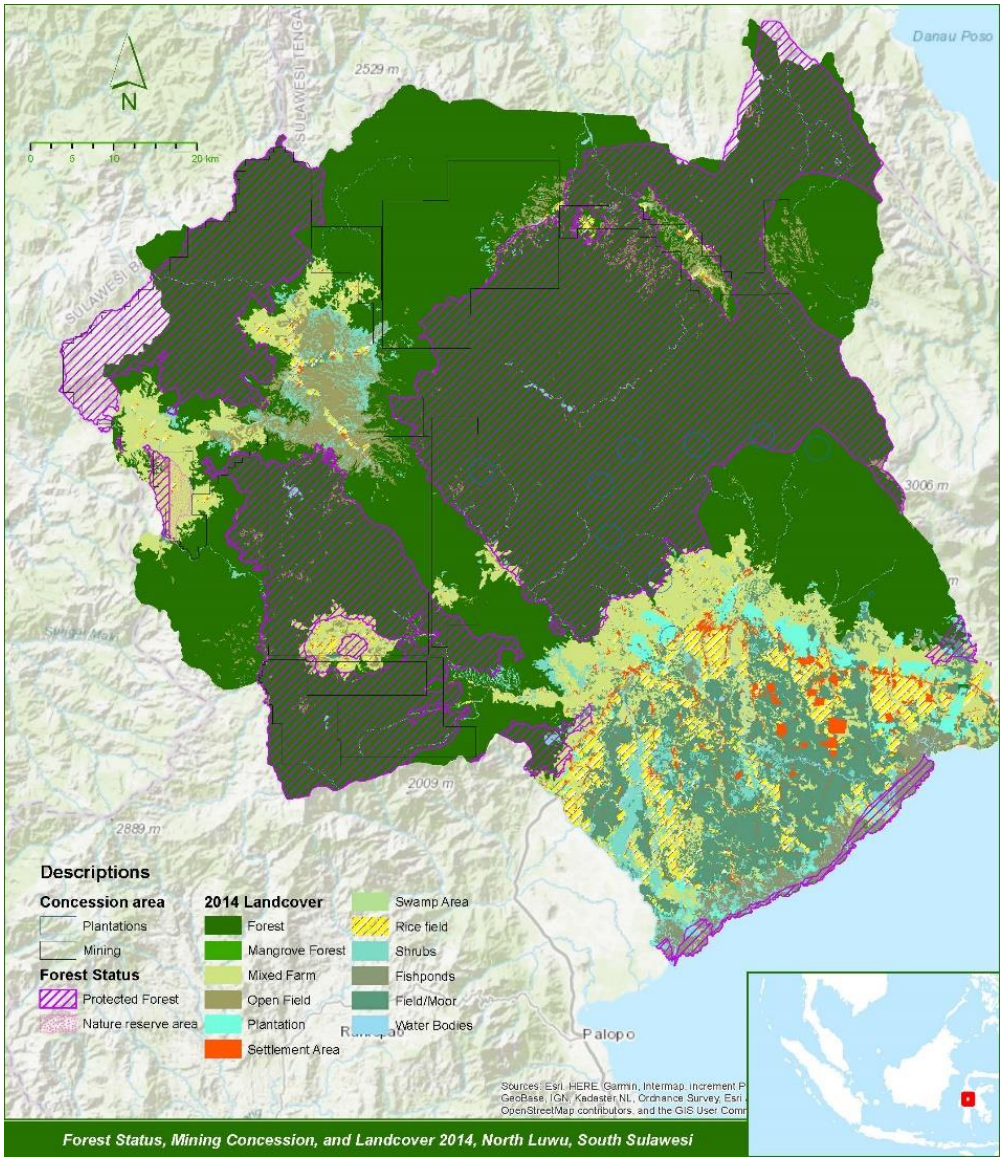


North Luwu, South Sulawesi

The North Luwu District is dominated by 73 percent forest coverage, while the agriculture area (farm and rice fields) only cover around 11 percent. North Luwu also designated 45 percent (333,364.44 Ha) as a conservation area (Protected Forest and Nature Reserved Area), and less than one percent has been converted into agriculture and other purposes.

The map below shows potential land management conflict where existing mining concession are overlapping with the protected forest especially in the western region.

Figure 7: Map of North Luwu, South Sulawesi



Forest Status, Mining Concession, and Landcover 2014, North Luwu, South Sulawesi

Pelalawan (Bandar Sei Kajang), Riau

Pelalawan is almost entirely dominated by oil palm and underlain by oil and gas concessionaries. The administrative boundaries of Pelalawan vary dependent on the data source (BIG versus BPS) with persistent areas of non-agreement as show in Figure 8.

Figure 8: Map of Administrative Boundaries in Pelalawan (Bandar Sei Kajang), Riau

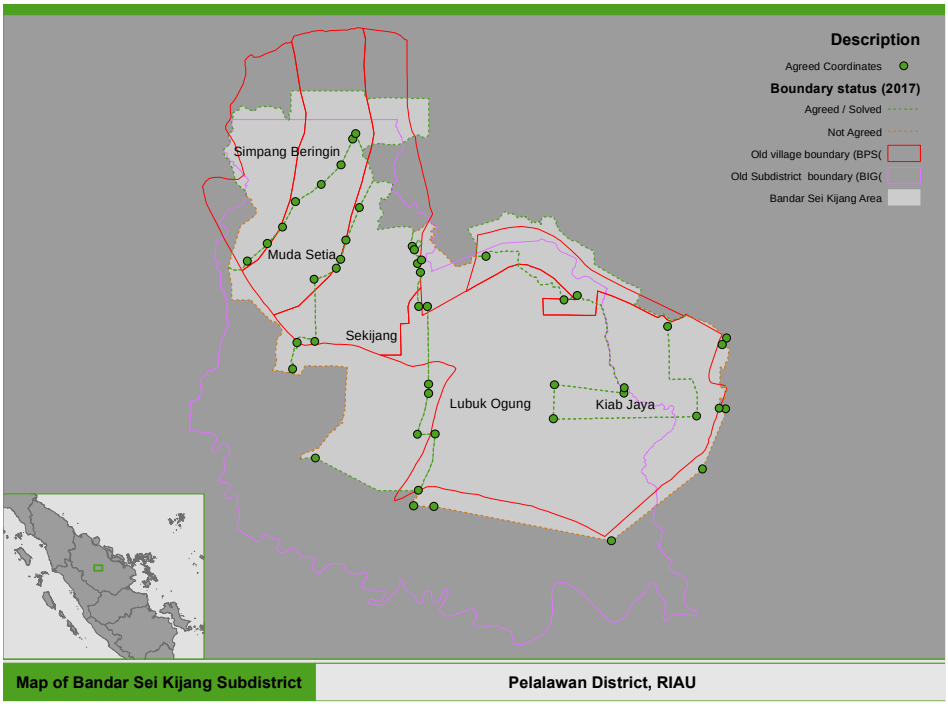
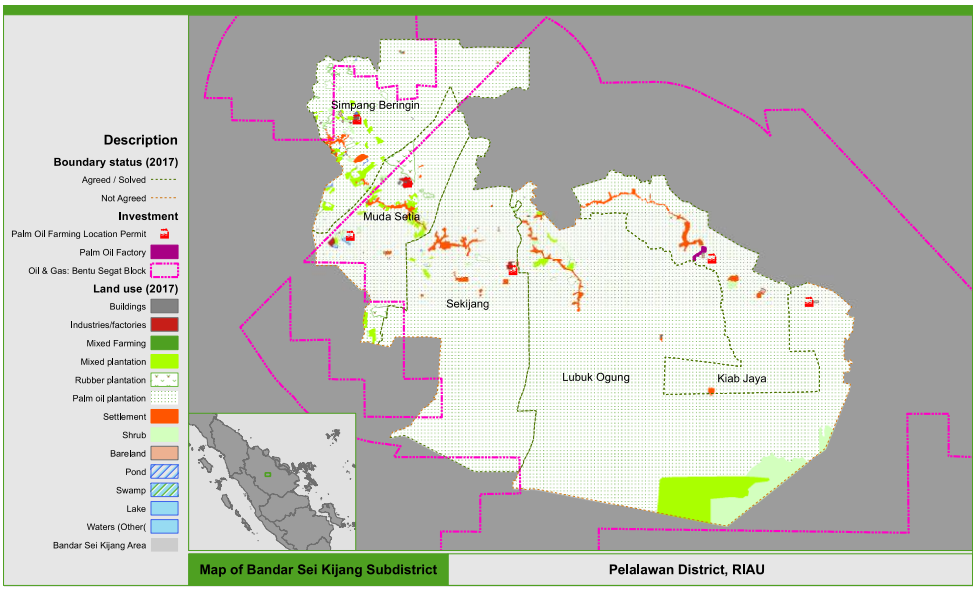


Figure 9: Map of Investment and Landcover in Pelalawan (Bandar Sei Kajang), Riau

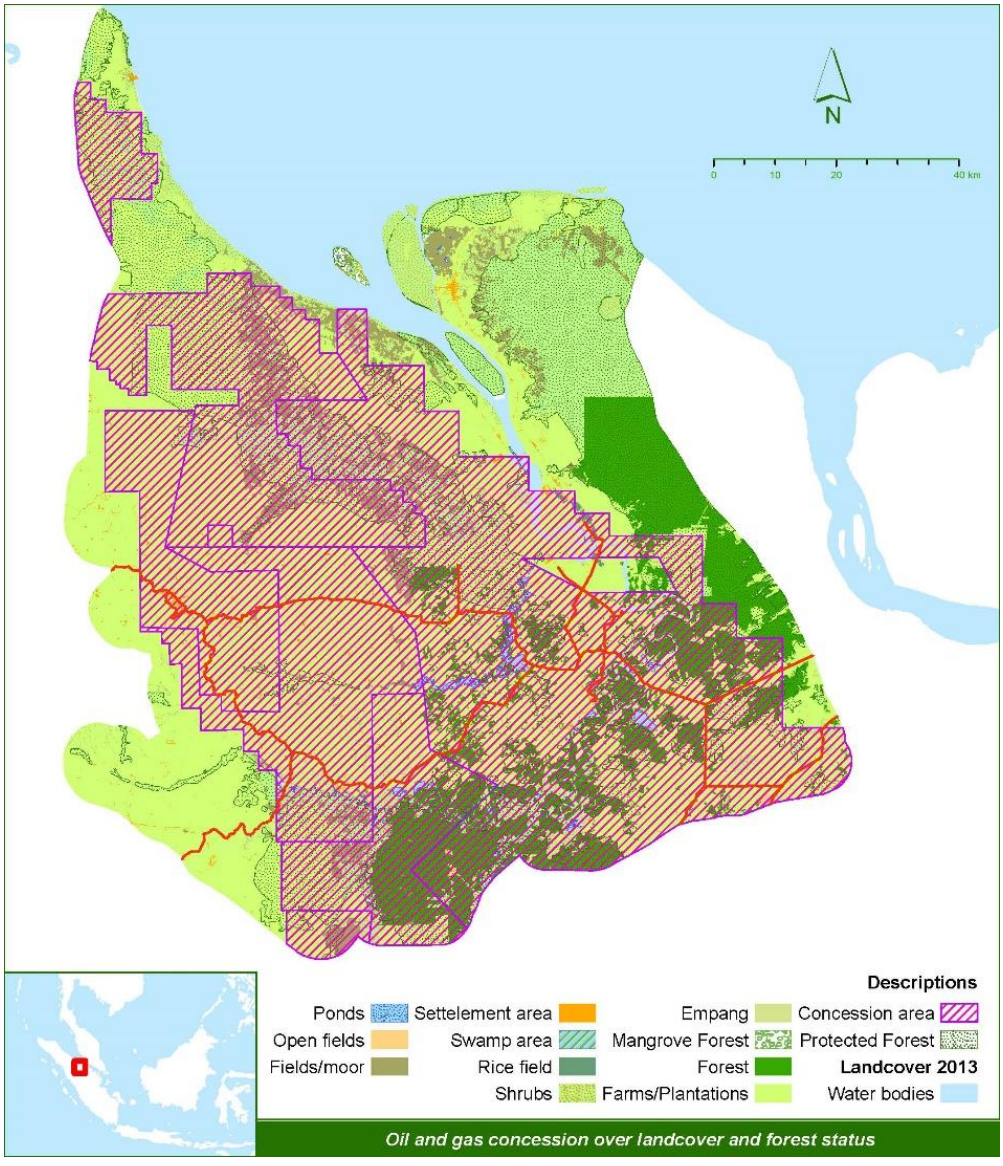


Rokan Hilir, Riau

38 percent area of Rokan Hilir is covered by forest area with another 36 percent used for agriculture (farm, plantation, and rice field). The Rokan Hilir District designated 40 percent (367,726.85 Ha) of its area into protected forest, however 11 percent has already been converted for farm, plantation, and settlement purposes.

The map below shows oil and gas concession areas which cover almost the entire area of Rokan Hilir including its protected forest area.

Figure 10: Map of Rokan Hilir, Riau

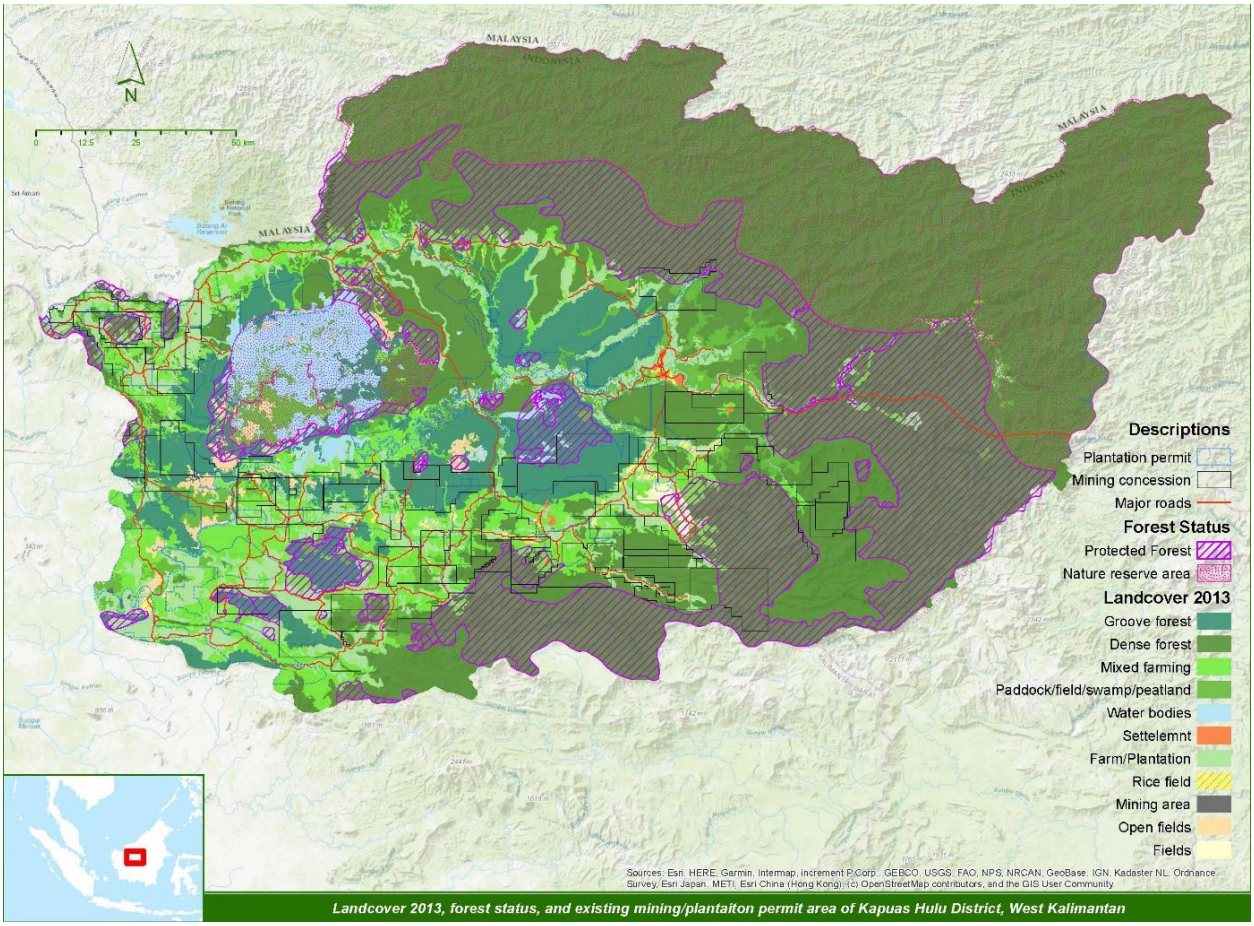


Kapuas Hulu, West Kalimantan

The Kapuas Hulu District land cover is dominated by dense forest, which cover more than 60 percent of the district. Over 56 percent of the district was designated for conservation (Protected forest and Nature reserved), though 3 percent or 58,920.93 Hectare has been converted into mixed farms, settlements, plantations, and rice fields.

Furthermore, the map below shows the 2014 landcover overlaid with forest status, and concession areas (mining and plantation), with clear areas of overlap between conservation and concession areas. The MCA-I grant in this region was focused on community-based peatland restoration project.

Figure 11: Map of Kapuas Hulu, West Kalimantan



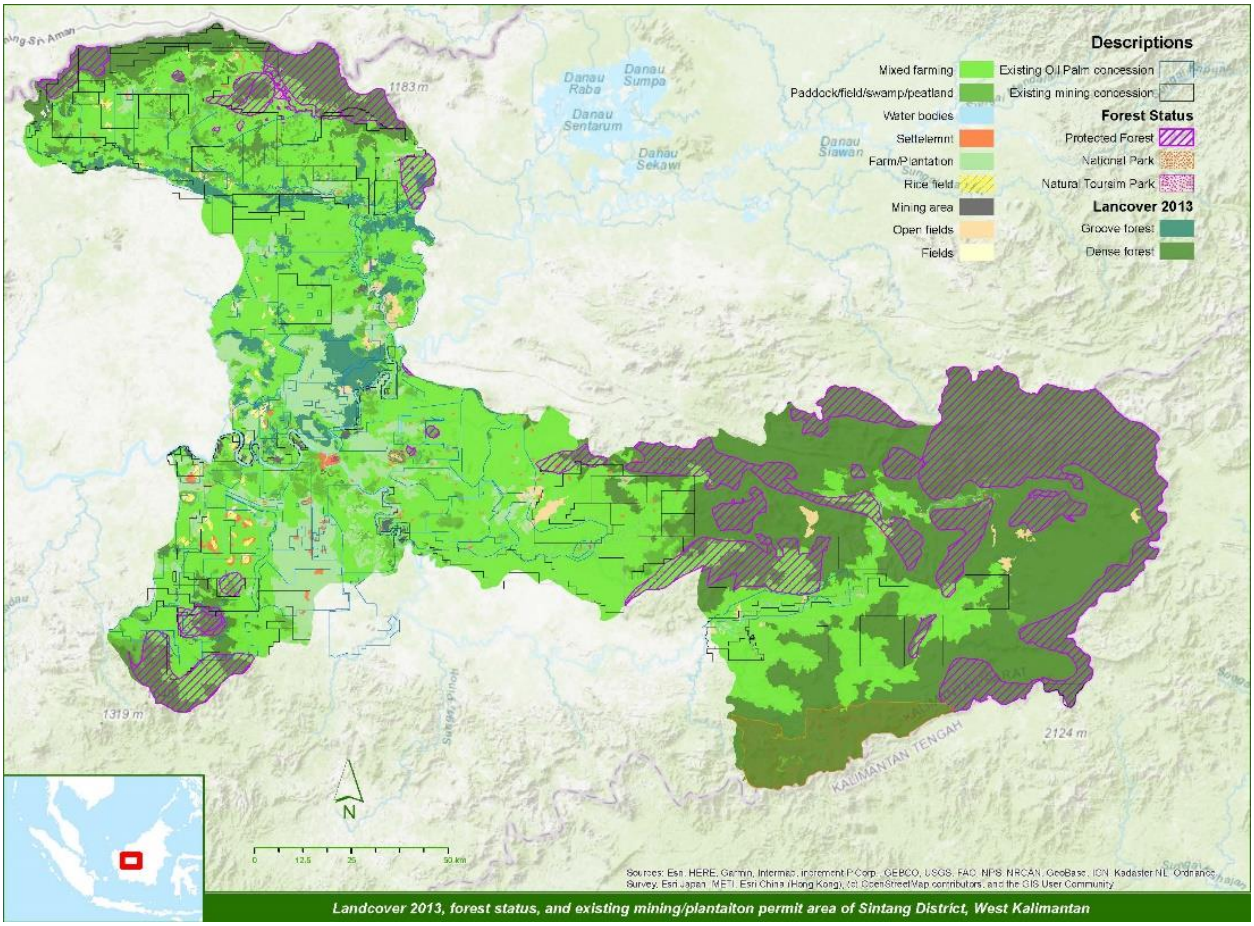
Landcover 2013, forest status, and existing mining/plantaiton permit area of Kapuas Hulu District, West Kalimantan

Sintang, West Kalimantan

About 48 percent of the Sintang district landcover is dense forest and three percent of it is swamp/ peatland/fields. Mixed farms also dominate the Sintang landcover, comprising 43 percent of the total area. 25 percent or 542,888.55 Ha of district was designated for conservation (National Park, Protected Forest and Natural Tourism Park). However, more than 14 percent of this conservation area already been converted to mixed farms, settlements, plantations, and mining.

The map below shows and overlay of land-use designations. Multiple land-use purposes overlap including mining (with overlap between community mining and the broader mining concession area), between concession use (with overlap between mining and plantations), and with forest conservation.

Figure 12: Map of Sintang, West Kalimantan



Landcover 2013, forest status, and existing mining/plantaiton permit area of Sintang District, West Kalimantan

D. Administrative

Three portions of the Administrative section have been updated including (i) Clearances, (ii) Dissemination Plans, (iii) Evaluation Team Roles and Responsibilities and (iv) Evaluation Timeline and Reporting Schedule.

i. Clearance Requirements

In addition to the standard IRB requirements and clearances noted in Section 4.A. of the main report the ET has become aware of additional requirements for conducting research in Indonesia as of 2019. On July 16, 2019 the Indonesian House of Representatives passed into law the National System of Science and Technology bill. The law imposes high fines on researchers who do not hold the proper research permits. As of May 2021, there remains some ambiguity as to the authorizing representative, the extent to which this applies to social science research and the extent to which this applies to research pre-existing the law's enactment though the ET is actively pursuing this option at this time. The ET will work closely with BAPPENAS to ensure the proper permits and/or letters of introduction are in place prior to the commencement of fieldwork. To ensure this process is completed the evaluation design and data collection workplan must be in place at least one month prior to the start of data collection.

ii. Dissemination Plans

The evaluation containing findings from expansion and pilot districts will produce one evaluation report in early 2022. Upon submission of a draft report, Social Impact will conduct dissemination events in the U.S. (at MCC) and in Indonesia. If travel remains restricted at that time due to the COVID-19 pandemic, SI will hold dissemination as a virtual event. Since MCA-I is no longer active the ET will work with MCC and BAPPENAS to identify key stakeholders for inclusion in dissemination activities in Indonesia.

iii. Evaluation Team Roles and Responsibilities

The evaluation team has been reformatted to include the following individuals and responsibilities at Stage 2:

Table 22: Evaluation Team Roles and Responsibilities

Position	Roles and Responsibilities
Land Tenure and Governance Specialist	• Supervise the evaluation team's work, with overall guidance and technical input from SI's home office staff. • Direct evaluation design (participate in scoping trip), data collection, analysis, final report writing and debrief presentation • Serve as point of contact with MCC and key government and private sector stakeholders
Geospatial Specialist	• Collect, collate (where needed) and review geospatial information available at various levels (district, provincial, national) • Provide data analytic support to the team • Create maps and other visualizations of land administrative data, as needed • Provide inputs into the evaluation design, including availability of data, format, and frequency of collection to track interim and longer-term outcomes
Junior Analyst	• Support evaluation design development , data collection, analysis and report writing. • Ensure ET follows SI and MCC quality assurance standards for evaluations
Research Assistant	• Provide support in data collection, analysis and and meeting logistics • Obtain and review investor, land use plans and land administrative data
Local Research Assistants (3)	• Provide Support arranging meetings and identifying remote contact details. • Provide support including facilitation of introductions to local respondents • Support the obtainment of local investor, land use plans and administrative data • Complete GIS survey with dataholders

As at Stage 1, all individuals with the exception of the team's junior analyst are based in Indonesia and all team members have extensive experience working in Indonesia with government, private sector, NGOs and local communities.

iv. Evaluation Timeline and Reporting Schedule

Three years following Compact closeout, Stage 2, data collection will commence in 2021 for both expansion and pilot sites and focuses on identifying changes in short- and medium-term outcomes. While the original evaluation design had Stage 2 taking place in 2018, right after Compact close a series of delays in contracting, the commencement of the Stage 2 Scoping Trip, and the COVID-19 pandemic has pushed Stage 2 data collection to 2021. The advantage of this delay is that is provides the ET to look deeper into medium-term outcomes and explore the potential of capturing long-term outcomes based on progress to date. The disadvantage is that staff turnover both in government and implementation partners may result is some challenges with project recall.

The timeline for Stage 1 has been updated below with actual deliverable submission dates. In addition, the ET has proposed timelines for both expansion and pilot site data collection in Stage 2.

Table 23: Stage 1 Deliverable Timeline (Final)

Task	Submission Date
Draft Evaluation Design Report (EDR)	Jul. 27, 2016
Evaluation Design Report (EDR) Finalized	Nov. 18, 2016
Qualitative Data Collection Protocols and Tools Finalized	Oct. 25, 2016
Debrief Presentation to MCA-I following Stage 1 Data Collection	Oct. 17, 2017
Draft Evaluation Report (Stage 1)	Oct. 31, 2016
Obtain MCC and stakeholder feedback	Jan. 20, 2017
Presentation to MCC on Findings, Conclusions and Lessons Learned	Jan. 26, 2017
Data Anonymized and in Note Form	Mar. 24, 2017
Final Evaluation Report Approved	Jul. 12, 2017

Table 24: Stage 2 (Expansion Sites) Deliverable Timeline (*Final*/Proposed)

Task	Deadline
SOW (2 weeks for approval) and Scoping trip (7-9 days)	*5/1/2019*
Scoping Trip	*7/8/2019 – 7/18/2019*
Draft Trip Report	*8/1/2019*
Obtain MCC and stakeholder feedback on Trip Report	*10/15/2019*
Update the Evaluation Design Report	*11/4/2019*
Update the Evaluation Design Report – 2021 (due to COVID-19)	5/31/2021
Obtain MCC and stakeholder feedback	6/21/2021
Final Evaluation Design Report (updated as needed)	8/9/2021
Nesstar Metadata Template for Evaluation Catalog entry	8/16/2021
Draft English questionnaires	5/31/2021
Obtain MCC and stakeholder feedback	7/7/2021
Final evaluation materials (updated as needed)	8/9/2021
Translate questionnaires	8/23/2021
Submission and approval of IRB Package	8/23/2021
SOW (2 weeks for approval) and Early Results data collection trip	8/23/2021
Sub-team 1: Location TBD (3-4 weeks)	Sept
Sub-team 2: Location TBD (3-4 weeks)	Sept
Early Results trip report	10/31/2021
Admin/geospatial data collection	Sept
Geospatial Data Analysis	Oct-Nov
Qualitative Data Analysis	Oct-Nov
Draft Evaluation Report	1/31/2022
Local Stakeholder Feedback + MCC Feedback (simultaneous review) with response	2/21/2022
Final Evaluation Report and Public Statement	5/1/2022
Executive Summary in BI	5/31/2022
Data and analysis file prep & submission per MCC guidelines	7/30/2022

Task	Deadline
Presentation materials submission and presentation of results to MCC (D.C.)	3/2/2022
SOW and Presentation of results to local stakeholders (Jakarta)	2/21/2022
Development of Results Brief (Dissemination Draft)	2/14/2022
Dissemination trip report	3/14/2022

Table 25: Stage 2 (Pilot Sites) Deliverable Timeline (Proposed)[69]

Task	Deadline
Draft English questionnaires	6/4/2021
Obtain MCC and stakeholder feedback	6/21/20217/7/2021
Final evaluation materials (updated as needed)	7/5/20218/9/2021
Translate questionnaires	8/23/2021
Submission and approval of IRB Package	8/23/2021
SOW and Pilot District data collection trip	8/23/2021
Sub-team 1: Location TBD (3 weeks)	Sept
Sub-team 2: Location TBD (3 weeks)	Sept
Pilot District trip report	10/31/2021
Admin/geospatial data collection (intermittent/as needed)	Sept
Geospatial Data Analysis	Oct-Nov
Qualitative Data Analysis	Oct-Nov
Draft Evaluation Report	1/31/2022
Local Stakeholder Feedback + MCC Feedback (simultaneous review) with response (6 weeks)	2/21/2022
Final Evaluation Report and Public Statement	5/1/2022
Executive Summary in BI	5/31/2022
Data and analysis file prep & submission per MCC guidelines	7/30/2022
Presentation materials and presentation of results to MCC (D.C.)	3/2/2022
SOW and Presentation of results to local stakeholders (Jakarta)	2/21/2022
Development of Results Brief	2/14/2022
Dissemination trip report	3/14/2022

[69] Expansion and Pilot District data collection will occur concurrently with findings from pilot and expansion sites incorporated into one report and dissemination event.

ANNEX 2: EVALUATION DESIGN CHANGES FOR PILOT DISTRICTS (June 2020)

Annex 2 details changes from Annex 1 applied specifically to the second evaluation on pilot districts (Stage 2b). There are three changes to Annex 1 to ensure planning addressed the context of pilot districts in Stage 2. Other aspects of the design remain unchanged from Annex 1.

1. Pilot Site Qualitative Data Collection Instruments

Table 19 of Annex 1 specified the data collection instruments used for expansion districts in Stage 2. An updated version of Table 19 below refers to the Stage 1 (S1) pilot instrument numbers, makes note of the expansion district instrument numbers (S2a), and notes which instruments are applied to which evaluation. The instruments approved for Stage 2 expansion districts will include some minor revisions for pilot sites, and some village-level instruments from Stage 1 will be included at pilot sites.

To simplify the instrument selection for pilot sites in Stage 2, and to account for time that has lapsed since the completion of the project, Pilot Site Instruments 1 and 2 will be combined -- both focus on village-level key informants. Focus group discussions, guided by Instruments 10 and 12 were originally to be combined, but have now been dropped and replaced with a short, remote KIIs as part of the evaluation's COVID-19 risk mitigation measures. Stage 1 instruments represented very similar guides for Village Participation Teams (VPTs), village leaders and training beneficiaries. Due to the significant overlap among these categories, and the fact that the VPTs have not been operating since the end of the PLUP, the Evaluation Team suggests this consolidated set of instruments.

In the COVID Risk Assessment and Mitigation Matrix submitted in April 2021, SI had proposed to conduct a short closed-ended survey with a small sample of community members to replace FGDs with community members in pilot sites, if the study locations were deemed safe enough for in-person work. Due to the surge of COVID-19 pandemic throughout Indonesia at the time of making EDR revisions in August 2021, these surveys have been dropped (which was noted as a contingency measure in the Matrix document). Remote interviews with village leaders in pilot sites will still be conducted where possible. Data on outcomes that were going to be covered in the closed-ended survey will be covered in the village leader KIIs. This includes information on recent border disputes and resolution processes, perceptions and experiences related to the land permitting process, perceptions of land security, and perceptions related to land-based investment. There are limitations to relying on a sole village-level key informant for understanding community-level dynamics. One person may not have comprehensive information on all aspects, and there would be no means to triangulate their information with perspectives from others in the community. In addition, village leaders may have different perceptions about these topics than a general community member. The KII protocol is designed to try to address these issues by explicitly asking for both the village leader's personal experience and perceptions, as well as perspectives related to the community more broadly. There will be limitations to the findings we will be able to derive from the village-level qualitative data. These will be outlined and discussed in the final report, along with any measures taken to address these limitations.

In addition, FGDs with Concessionaire/Land Claimants/Businesses (#11 below) has been dropped in favor of KIIs only. This is based on Stage 1 experience in which these individuals are uncomfortable discussing proprietary business information and decisions in a group setting.

Interviews with MCA-I staff (#6) have also been dropped as MCA-I ceased operations with the Compact's close.

Finally, for both pilot and expansion sites an online, remotely administered, questionnaire has been added. This questionnaire was administered to all PLUP districts in 2020, including those not sampled for more in-depth exploration as part of the evaluation. This is an effort to capture the breadth of PLUP experiences in the country.

Table 26: Expansion and Pilot Site Qualitative Data Collection Instruments

S1 No	S2a No	Type	Name	Stage 1 Pilot Sites[1]	Stage 2 Expansion Sites	Stage 2(b) Pilot Sites
1	-	KII	Village level community leaders	Yes	No	Yes
2	-	KII	Village level officials (particularly those in the VPT or dispute resolution forum(s))	Yes	No	Combined with #1
3	1	KII	District and sub-district level officials (line agencies, One-stop Shops (OSS))	Yes	Yes	Yes
3B	3B	Questionnaire	District (BAPPEDA in all PLUP Districts – Remote Implementation 2020)	No	Yes	Yes
4	2	KII	Provincial level officials	Yes	Yes	Yes
5	3	KII	National level officials (ministries)	Yes	Yes	Yes
6	-	KII	MCA-I staff (GP leadership, PMAP 1 management, and GP M&E team)	Yes	No	No
7	4	KII	(Former) Implementing Partners, former MCA-I, and MCC	Yes	Yes – to the extent possible	Yes – to the extent possible
8	5	KII	NGOs/CSOs/research institutions working in land-use planning and renewable energy projects	Yes	Yes	Yes
9	6	KII	Concessionaires/Land Claimants/Businesses	Yes	Yes	Yes
New10	12	Questionnaire	Geospatial Data Holders and Managers Survey	No	Yes	Yes

2. Number of Planned Observations by Instrument Type and Region

Table 21 in Annex 1 represented the number of interviews by stakeholder type and location for expansion districts. For pilot districts, location selection will remain consistent with Stage 1 locations, with the estimated number of interviews as follows:

Table 27: Number of planned observations by instrument type and region (Pilot Stage 2)

Instrument S1#	Stakeholder Category	Location	TOTAL

		Jakarta and Bogor	Jambi (Muaro Jambi, Merangin, Muaro Bungo)	West Sulawesi (Mamuju, Mamasa)	
1	Village level leaders*	0	6	6	12
3	District and sub-district level officials	0	6	4	10
4	Provincial level officials	0	3	3	6
5	National level officials	4	0	0	4
7	(Former) Implementing Partners, former MCA-I, and MCC **	4	0	0	4
8	NGOs/CSOs/research institutions	2	2	2	6
9	Concessionaires/Land Claimants/Businesses	2	4	4	10
New10	Geospatial Data Holders and Managers Survey	0	2	2	4
	TOTAL	12	23	21	56

* Although these interviews will be conduted remotely, some will be contingent upon physical travel by local team members to obtain contact information, which may be not be possible if travel is not deemed safe for local team members or local communities due to COVID-19. Should such movement not be feasible, the Evaluation Team will try to obtain the contact information for village heads from government respondents, where possible.
** Implementers, MCA-I and MCC have all be interviewed several times both as part of scoping and in Stage 1 and 2 data collection. Different than the other stakeholders, implementers have not participated in ongoing usage of PLUP products in the governance systems. They may therefore be interviewed as needed, but existing interviews maybe sufficient. Further, respondents at the national level (government officials, former implementing partners, NGOs/CSOs/research institutions and some businesses) are common across both pilot and expansion districts, and therefore one interview will suffice for both pilot and expansion sites.

Instruments used in Stage 2 for both pilot and expansion districts feature only minor differences. The instrument that will be used for village-level enquiry for pilot sites (Instrument # 1) will be modified from Stage 1. Village-level enquiry will not be conducted for expansion sites.

3. Evaluation Timeline and Reporting Schedule

COVID-19 has impacted the evaluation timeline and reporting schedule, documented in Annex 1, in both expansion and pilot sites.

ANNEX 3: EVALUATION DESIGN MATRIX

There have been no modifications to this matrix from Stage 1.

ANNEX 4: EVALUATION BUDGET

Per MCC's instructions regarding sensitivities around future procurements, the evaluation budget corresponding to this Evaluation Design Report has been provided to MCC separately.

ANNEX 5: COMMENT MATRIX

Pending for May 28, 2021 submission.